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**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549**

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**FORM 20-F**

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(Mark One)

- REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934  
OR
- ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934  
For the fiscal year ended January 31, 2016  
OR
- TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934  
For the transition period from \_\_\_\_\_ to \_\_\_\_\_  
OR
- SHELL COMPANY PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934  
Date of event requiring this shell company report \_\_\_\_\_  
Commission file number: 001-36866

**Summit Therapeutics plc**

(Exact name of Registrant as specified in its charter)

England and Wales  
(Jurisdiction of incorporation or organization)

85b Park Drive  
Milton Park, Abingdon  
Oxfordshire OX14 4RY  
United Kingdom

(Address of principal executive offices)

Glyn Edwards, Chief Executive Officer

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Milton Park, Abingdon  
Oxfordshire OX14 4RY  
United Kingdom

Tel: +44 (0)1235 443 939  
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(Name, Telephone, E-mail and/or Facsimile number and Address of Company Contact Person)

Securities registered or to be registered pursuant to Section 12(b) of the Act.

Title of each class

American Depositary Shares, each representing  
5 Ordinary Shares, par value £0.01 per share

Name of each exchange on which registered

The NASDAQ Stock Market LLC

Securities registered or to be registered pursuant to Section 12(g) of the Act.

None

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act.

None

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report.

61,290,740 ordinary shares, par value £0.01 per share

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes  No

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934. Yes  No

Note—checking the box above will not relieve any registrant required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 from their obligations under those Sections.

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes  No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes  No  (not required)

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of "accelerated filer and large accelerated filer" in Rule 12b-2 of the Exchange Act (check one):

Large accelerated filer

Accelerated filer

Non-accelerated filer

Indicate by check mark which basis of accounting the registrant has used to prepared the financial statements included in this filing:

U.S. GAAP

International Financial Reporting Standards as issued  
by the International Accounting Standards Board

Other

If "Other" has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow. Item 17  Item 18

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes  No

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TABLE OF CONTENTS

	<u>Page</u>
<b><u>PART I</u></b>	1
Item 1: <a href="#">Identity of Directors, Senior Management and Advisers</a>	1
Item 2: <a href="#">Offer Statistics and Expected Timetable</a>	1
Item 3: <a href="#">Key Information</a>	1
Item 4: <a href="#">Information on the Company</a>	39
Item 4A: <a href="#">Unresolved Staff Comments</a>	96
Item 5: <a href="#">Operating and Financial Review and Prospects</a>	96
Item 6: <a href="#">Directors, Senior Management and Employees</a>	111
Item 7: <a href="#">Major Shareholders and Related Party Transactions</a>	128
Item 8: <a href="#">Financial Information</a>	130
Item 9: <a href="#">The Listing</a>	131
Item 10: <a href="#">Additional Information</a>	132
Item 11: <a href="#">Quantitative and Qualitative Disclosures About Market Risk</a>	142
Item 12: <a href="#">Description of Securities other than Equity Securities</a>	143
<b><u>PART II</u></b>	145
Item 13: <a href="#">Defaults, Dividend Arrearages and Delinquencies</a>	145
Item 14: <a href="#">Material Modifications to the Rights of Security Holders and Use of Proceeds</a>	145
Item 15: <a href="#">Controls and Procedures</a>	145
Item 16A: <a href="#">Audit Committee Financial Expert</a>	146
Item 16B: <a href="#">Code of Ethics</a>	147
Item 16C: <a href="#">Principal Accountant Fees and Services</a>	147
Item 16D: <a href="#">Exemptions from the Listing Standards for Audit Committees</a>	147
Item 16E: <a href="#">Purchases of Equity Securities by the Issuer and Affiliated Purchasers</a>	147
Item 16F: <a href="#">Change in Registrant’s Certifying Accountant</a>	147
Item 16G: <a href="#">Corporate Governance</a>	148
Item 16H: <a href="#">Mine Safety Disclosure</a>	148
<b><u>PART III</u></b>	149
Item 17: <a href="#">Financial Statements</a>	149
Item 18: <a href="#">Financial Statements</a>	149
Item 19: <a href="#">Exhibits</a>	150

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## GENERAL INFORMATION

In this Annual Report on Form 20-F, references to “Summit,” “we,” “us,” and “our” or to the “company” refer to Summit Therapeutics plc and its consolidated subsidiaries, except where context otherwise requires.

The trademarks, trade names and service marks appearing in this Annual Report on Form 20-F are the property of their respective owners.

## PRESENTATION OF FINANCIAL AND OTHER DATA

The consolidated financial statement data as of January 31, 2016 and 2015 and for the years ended January 31, 2016, 2015 and 2014 have been derived from our consolidated financial statements, as presented at the end of this Annual Report, which have been prepared in accordance with International Financial Reporting Standards, or IFRS, as issued by the International Accounting Standards Board, or IASB, and as adopted by the European Union and audited in accordance with the standards of the Public Company Accounting Oversight Board (United States).

All references in this Annual Report to “\$” are to U.S. dollars and all references to “£” are to pounds sterling. Solely for the convenience of the reader, unless otherwise indicated, all pounds sterling amounts as of and for the year ended January 31, 2016 have been translated into U.S. dollars at the rate at January 29, 2016, the last business day of our fiscal year ended January 31, 2016, of £1.00 to \$1.4184. These translations should not be considered representations that any such amounts have been, could have been or could be converted into U.S. dollars at that or any other exchange rate as of that or any other date.

## FORWARD-LOOKING STATEMENTS

This Annual Report contains forward-looking statements that involve substantial risks and uncertainties. All statements contained in this Annual Report, other than statements of historical fact, including statements regarding our strategy, future operations, future financial position, future revenues, projected costs, prospects, plans and objectives of management, are forward-looking statements. The words “anticipate,” “believe,” “estimate,” “expect,” “intend,” “may,” “plan,” “predict,” “project,” “target,” “potential,” “will,” “would,” “could,” “should,” “continue,” and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. The forward-looking statements in this Annual Report include, among other things, statements about:

- the timing and conduct of our clinical trials of ezutromid (formerly SMT C1100) for the treatment of patients with DMD and ridinilazole (formerly SMT19969) for the treatment of patients with CDI, including statements regarding the timing of initiation and completion of the clinical trials and the period during which the results of the clinical trials will become available;
- the timing of and our ability to obtain marketing approval of ezutromid and ridinilazole, and the ability of ezutromid and ridinilazole to meet existing or future regulatory standards;
- our plans to continue the research and development of a potential optimized formulation of ezutromid, internally developed second generation utrophin modulators, and future generation modulators that we are developing in collaboration with the University of Oxford;
- our plans to pursue research and development of other future product candidates;
- the potential advantages of ezutromid and ridinilazole;
- the rate and degree of market acceptance and clinical utility of ezutromid and ridinilazole;
- our estimates regarding the potential market opportunity for ezutromid and ridinilazole;
- our sales, marketing and distribution capabilities and strategy;

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## [Table of Contents](#)

- our ability to establish and maintain arrangements for manufacture of ezutromid and ridinilazole;
- our intellectual property position;
- our estimates regarding expenses, future revenues, capital requirements and needs for additional financing;
- the impact of government laws and regulations; and
- our competitive position.

We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements we make. We have included important factors in the cautionary statements included in this Annual Report, particularly in the “Risk Factors” section in this Annual Report, that we believe could cause actual results or events to differ materially from the forward-looking statements that we make. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures or investments we may make.

You should read this Annual Report and the documents that we have filed as exhibits to this Annual Report completely and with the understanding that our actual future results may be materially different from what we expect. We do not assume any obligation to update any forward-looking statements.



## [Table of Contents](#)

### Selected Consolidated Balance Sheet Data

	2016	2016	As of January 31, 2015	2014	2013
			(in thousands)		
Cash and cash equivalents	\$ 23,125	£ 16,304	£ 11,265	£ 2,030	£ 3,379
Working capital <sup>(1)</sup>	1,909	1,346	163	(804)	(722)
Total assets	35,565	25,076	19,396	7,295	4,377
Accumulated losses reserve	(67,151)	(47,343)	(30,255)	(45,183)	(39,090)
Total equity	\$ 29,974	£ 21,133	£ 14,966	£ 4,762	£ 2,851

(1) We define working capital as trade and other receivables (including current tax receivables) less current liabilities.

### Exchange Rate Information

The table below shows the period end, average, high and low exchange rates of U.S. dollars per pound sterling for the periods shown. The exchange rate on May 6, 2016 was £1.00 to \$1.444. The rates set forth below are provided solely for your convenience and may differ from the actual rates used in the preparation of our consolidated financial statements included in this Annual Report.

	Period End <sup>(1)</sup>	Average <sup>(2)</sup>	Low	High
	(\$ per pound sterling)			
<b>Fiscal Year Ended January 31:</b>				
2012	1.575	1.608	1.530	1.669
2013	1.586	1.593	1.536	1.628
2014	1.645	1.572	1.484	1.661
2015	1.503	1.634	1.502	1.717
2016	1.418	1.518	1.417	1.588
<b>Month Ended:</b>				
November 2015	1.504	1.519	1.504	1.543
December 2015	1.475	1.498	1.475	1.521
January 2016	1.418	1.439	1.417	1.469
February 2016	1.393	1.429	1.387	1.458
March 2016	1.438	1.425	1.395	1.451
April 2016	1.463	1.432	1.408	1.463
May 2016 (through May 6, 2016)	1.444	1.452	1.444	1.467

(1) In the event that the period end fell on a day for which data are not available, the exchange rate on the prior most recent business day is given.

(2) The average of the noon buying rate for pounds sterling on the last day of each full month during the relevant year or each business day during the relevant month indicated.

### B. Capitalization and Indebtedness

Not applicable.

### C. Reasons for the Offer and Use of Proceeds

Not applicable.

### D. Risk Factors

*Our business has significant risks. You should consider carefully the risks described below, together with the other information contained in this Annual Report, including our financial statements and the related notes. If any of the following risks occur, our business, financial condition, results of operations and future growth prospects could be materially and adversely affected.*

### **Risks Related to our Financial Position and Need for Additional Capital**

*We have incurred significant losses since our inception. We expect to incur losses for at least the next several years and may never generate profits from operations or maintain profitability.*

Since inception, we have incurred significant operating losses. Our net loss was approximately £17.1 million for the year ended January 31, 2016, £11.3 million for the year ended January 31, 2015 and £6.1 million for the year ended January 31, 2014. As of January 31, 2016, we had an accumulated deficit of £47.3 million. To date, we have financed our operations primarily through issuances of our ordinary shares and American Depositary Shares, or ADSs, and development funding and other assistance from government entities, philanthropic, non-government and not for profit organizations and patient advocacy groups for our product candidates. We have devoted substantially all of our efforts to research and development, including clinical trials. We have not completed development of any drugs. We expect to continue to incur significant expenses and increasing operating losses for at least the next several years. The net losses we incur may fluctuate significantly from quarter to quarter and year to year. We anticipate that our expenses will increase substantially in connection with conducting clinical trials for our lead product candidates, ezutromid (formerly SMT C1100) for the treatment of patients with Duchenne muscular dystrophy, or DMD, and ridinilazole (formerly SMT19969) for the treatment of patients with *Clostridium difficile* infection, or CDI, and seeking marketing approval for ezutromid and ridinilazole in the United States and the European Union, as well as other geographies. In addition, if we obtain marketing approval of ezutromid or ridinilazole, we expect to incur significant sales, marketing, distribution and outsourced manufacturing expense, as well as ongoing research and development expenses.

In addition, our expenses will increase if and as we:

- continue the research and development of a potential optimized formulation of ezutromid, internally developed second generation utrophin modulators, and future generation modulators that we are developing in collaboration with the University of Oxford;
- seek to identify and develop additional product candidates;
- seek marketing approvals for any product candidates that successfully complete clinical development;
- ultimately establish a sales, marketing and distribution infrastructure and scale up external manufacturing capabilities to commercialize any product candidates for which we receive marketing approval;
- acquire or in-license other product candidates and technology;
- maintain, expand and protect our intellectual property portfolio;
- hire additional clinical, regulatory and scientific personnel;
- expand our physical presence in the United States; and
- add operational, financial and management information systems and personnel, including personnel to support our product development and planned future commercialization efforts.

Our ability to generate profits from operations and remain profitable depends on our ability to successfully develop and commercialize drugs that generate significant revenue. Based on our current plans, we do not expect to generate significant revenue unless and until we obtain marketing approval for, and commercialize, ezutromid for the treatment of DMD or ridinilazole for the treatment of CDI. This will require us to be successful in a range of challenging activities, including:

- successfully initiating and completing clinical trials of ezutromid for the treatment of DMD and ridinilazole for the treatment of CDI;
- obtaining approval to market ezutromid for the treatment of DMD and ridinilazole for the treatment of CDI;

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## Table of Contents

- protecting our rights to our intellectual property portfolio related to ezutromid and ridinilazole;
- contracting for the manufacture of clinical and commercial quantities of ezutromid and ridinilazole;
- negotiating and securing adequate reimbursement from third-party payors for ezutromid and ridinilazole; and
- establishing sales, marketing and distribution capabilities to effectively market and sell ezutromid and ridinilazole in the United States and the European Union, as well as other geographies.

We may never succeed in these activities and, even if we do, may never generate revenues that are significant enough to generate profits from operations. Even if we do generate profits from operations, we may not be able to sustain or increase profitability on a quarterly or annual basis. Our failure to generate profits from operations and remain profitable would decrease the value of our company and could impair our ability to raise capital, expand our business, maintain our research and development efforts, diversify our product offerings or continue our operations. A decline in the value of our company could also cause you to lose all or part of your investment.

***Our limited operating history may make it difficult for you to evaluate the success of our business to date and to assess our future viability.***

Our operations to date have been limited to organizing and staffing our company, developing and securing our technology, raising capital and undertaking preclinical studies and clinical trials of our product candidates. We have not yet demonstrated our ability to successfully complete development of any product candidates, obtain marketing approvals, manufacture a commercial scale product, or arrange for a third party to do so on our behalf, or conduct sales and marketing activities necessary for successful product commercialization. Consequently, any predictions you make about our future success or viability may not be as accurate as they could be if we had a longer operating history.

Assuming we obtain marketing approval for any of our product candidates, we will need to transition from a company with a research and development focus to a company capable of supporting commercial activities. We may encounter unforeseen expenses, difficulties, complications and delays and may not be successful in such a transition.

***We will need substantial additional funding. If we are unable to raise capital when needed, we could be forced to delay, reduce or eliminate our product development programs or commercialization efforts.***

We expect our research and development expenses to increase substantially in connection with our ongoing activities, particularly as we initiate and continue clinical trials of ezutromid for the treatment of DMD and ridinilazole for the treatment of CDI, continue our research activities and initiate preclinical programs for future product candidates. In addition, if we obtain marketing approval for ezutromid, ridinilazole or any of our future product candidates, we expect to incur significant commercialization expenses related to product sales, marketing, distribution and manufacturing. Furthermore, we expect to continue to incur additional costs associated with operating as a public company in the United States in addition to in the United Kingdom. Accordingly, we will need to obtain substantial additional funding in connection with our continuing operations. If we are unable to raise capital when needed or on attractive terms, we could be forced to delay, reduce or eliminate our research and development programs or any future commercialization efforts. Because of our need to raise additional capital to continue to fund our future operations, the significant losses and negative cash flows from operations that we have incurred since inception, and our accumulated deficit and limited cash resources, our independent registered public accounting firm has included an explanatory paragraph in its report on our financial statements for the year ended January 31, 2016, about our ability to continue as a going concern.

We believe that our existing cash and cash equivalents will be sufficient to enable us to fund our operating expenses and capital expenditure requirements for our major programs through the end of our fiscal year ending



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## [Table of Contents](#)

January 31, 2017. We estimate these capital resources will be sufficient to enable us to report the first set of 24-week muscle biopsy data from the first group of patients from our PhaseOut DMD clinical trial which is expected in January 2017, complete and report top line data from our Phase 1 clinical trial evaluating a potential optimized formulation of ezutromid which we expect to report in the third quarter of 2016, and complete and report top line data from our exploratory clinical trial of ridinilazole compared to fidaxomicin which we expect to report in the second half of 2016. We do not expect our existing capital resources will allow us to complete our PhaseOut DMD clinical trial.

We have based the foregoing estimate on assumptions that may prove to be wrong, and we could use our capital resources sooner than we currently expect. This estimate assumes, among other things, that we do not obtain any additional funding through grants and clinical trial support or through new collaboration arrangements. Our future capital requirements will depend on many factors, including:

- the progress, costs and results of clinical trials of ezutromid for DMD and ridinilazole for CDI;
- the scope, progress, costs and results of preclinical development, laboratory testing and clinical trials for our potential optimized formulation of ezutromid, internally developed second generation utrophin modulators, and future generation modulators that we are developing in collaboration with the University of Oxford;
- the number and development requirements of other future product candidates that we pursue;
- the costs, timing and outcome of regulatory review of ezutromid, ridinilazole and our other future product candidates;
- the costs and timing of commercialization activities, including product sales, marketing, distribution and manufacturing, for any of our product candidates that receive marketing approval;
- subject to receipt of marketing approval, revenue received from commercial sales of ezutromid, ridinilazole or any of our other future product candidates;
- the costs and timing of preparing, filing and prosecuting patent applications, maintaining and protecting our intellectual property rights and defending against any intellectual property-related claims;
- our ability to establish and maintain collaborations, licensing or other arrangements and the financial terms of such arrangements;
- the extent to which we acquire or invest in other businesses, products and technologies;
- the rate of the expansion of our physical presence in the United States; and
- the costs of operating as a public company in the United States and in the United Kingdom.

Conducting preclinical testing and clinical trials is a time-consuming, expensive and uncertain process that takes years to complete, and we may never generate the necessary data or results required to obtain marketing approval and achieve product sales. In addition, our product candidates, if approved, may not achieve commercial success. Our commercial revenues, if any, will be derived from sales of products that we are not planning to have commercially available for several years, if at all. Accordingly, we will need to continue to rely on additional financing to achieve our business objectives. In addition, we may seek additional capital due to favorable market conditions or strategic considerations, even if we believe that we have sufficient funds for our current or future operating plans. Additional financing may not be available to us on acceptable terms, or at all.

***Our independent registered public accounting firm has included an explanatory paragraph relating to our ability to continue as a going concern in its report on our audited financial statements included in this Annual Report.***

Our report from our independent registered public accounting firm for the year ended January 31, 2016, by reference to note 1 to our financial statements appearing at the end of this Annual Report, includes an

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## [Table of Contents](#)

explanatory paragraph describing our losses and negative cash flows from operations, as well as our accumulated deficit and limited cash resources, and stating that we will require additional capital to fund our future operations. If we are unable to obtain sufficient funding, our business, prospects, financial condition and results of operations will be materially and adversely affected and we may be unable to continue as a going concern. If we are unable to continue as a going concern, we may have to liquidate our assets and may receive less than the value at which those assets are carried on our audited financial statements, and it is likely that investors will lose all or a part of their investment. If we seek additional financing to fund our business activities in the future and there remains substantial doubt about our ability to continue as a going concern, investors or other financing sources may be unwilling to provide additional funding to us on commercially reasonable terms or at all.

### ***Raising additional capital may cause dilution to our investors, restrict our operations or require us to relinquish rights to our technologies or product candidates.***

Until such time, if ever, as we can generate substantial product revenues, we expect to finance our cash needs through a combination of equity offerings, collaborations, strategic alliances, grants and clinical trial support from government entities, philanthropic, non-government and not for profit organizations and patient advocacy groups, debt financings, and marketing, distribution or licensing arrangements. We do not have any committed external source of funds other than £0.1 million in funding that we are eligible to receive under our award funding agreement with the Wellcome Trust and £0.6 million of funding that we are eligible to receive under our agreement with Innovate UK, in each case subject to satisfying specified criteria. To the extent that we raise additional capital through the sale of equity or convertible debt securities, your ownership interest will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect your rights as an equity holder. Debt financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends or other distributions.

If we raise additional funds through collaborations, strategic alliances or marketing, distribution or licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs or product candidates or to grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds through equity or debt financings or other arrangements when needed, we may be required to delay, limit, reduce or terminate our product development or future commercialization efforts or grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves.

### **Risks Related to the Development and Commercialization of our Product Candidates**

***We depend heavily on the success of our lead product candidates, ezutromid, which we are developing for the treatment of DMD, and ridinilazole, which we are developing for the treatment of CDI. All of our other programs are still in the discovery or candidate optimization stage. If we are unable to commercialize ezutromid and ridinilazole, or experience significant delays in doing so, our business will be materially harmed.***

We have invested a significant portion of our efforts and financial resources in the development of ezutromid for DMD and ridinilazole for CDI, both of which are still in early clinical development. Our ability to generate product revenues, which may not occur for several years, if ever, will depend heavily on the successful development and commercialization of ezutromid and ridinilazole. The success of each of these product candidates will depend on a number of factors, including the following:

- successful completion of clinical development;
- receipt of marketing approvals from applicable regulatory authorities;
- establishing commercial manufacturing arrangements with third-party manufacturers;
- obtaining and maintaining patent and trade secret protection and regulatory exclusivity;
- protecting our rights in our intellectual property portfolio;

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## Table of Contents

- establishing sales, marketing and distribution capabilities;
- launching commercial sales of ezutromid or ridinilazole, as applicable, if and when approved, whether alone or in collaboration with others;
- acceptance of ezutromid or ridinilazole, as applicable, if and when approved, by patients, the medical community and third-party payors;
- effectively competing with other therapies; and
- maintaining a continued acceptable safety profile of ezutromid or ridinilazole, as applicable, following approval.

If we do not achieve one or more of these factors in a timely manner or at all, we could experience significant delays or an inability to successfully commercialize ezutromid or ridinilazole, which would materially harm our business.

***If clinical trials of our product candidates fail to demonstrate safety and efficacy to the satisfaction of the U.S. Food and Drug Administration, or the FDA, or the European Medicines Agency, or the EMA, or do not otherwise produce favorable results, we may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of ezutromid, ridinilazole or any other product candidate.***

In connection with obtaining marketing approval from regulatory authorities for the sale of any product candidate, we must complete preclinical development and then conduct extensive clinical trials to demonstrate the safety and efficacy of our product candidates in humans. Clinical testing is expensive, difficult to design and implement, can take many years to complete and is uncertain as to outcome. A failure of one or more clinical trials can occur at any stage of testing. The outcome of preclinical testing and early clinical trials may not be predictive of the success of later clinical trials, and interim results of a clinical trial do not necessarily predict final results. In particular, the small number of patients in our early clinical trials may make the results of these clinical trials less predictive of the outcome of later clinical trials. The design of a clinical trial can determine whether its results will support approval of a product, and flaws in the design of a clinical trial may not become apparent until the clinical trial is well advanced or completed. We have limited experience in designing clinical trials and may be unable to design and execute a clinical trial to support marketing approval. Moreover, preclinical and clinical data are often susceptible to varying interpretations and analyses, and many companies that have believed their product candidates performed satisfactorily in preclinical studies and clinical trials have nonetheless failed to obtain marketing approval of their products.

For example, in 2009, we assigned certain technology relating to our DMD program to BioMarin DMD Regulator Limited, or BioMarin. BioMarin conducted a Phase 1 clinical trial of a prior formulation of ezutromid in 48 healthy adult volunteers. Subjects in this clinical trial achieved low systemic exposure of the drug, and there was variability in systemic exposure across subjects. Following this clinical trial of a prior formulation of ezutromid, BioMarin elected not to continue development of our assigned technology, citing pharmaceutical and pharmacokinetic challenges. In public statements, BioMarin indicated that it had concluded that the likelihood of achieving a therapeutic effect in DMD patients was highly unlikely. In 2010, BioMarin transferred the assets, and all commercialization rights, back to us. In our first Phase 1b clinical trial of ezutromid in DMD patients, patients also had variable levels of ezutromid in the blood plasma following dosing, which we believe was potentially due to the impact of diet on absorption of ezutromid. In 2015, we reported top-line data from our second Phase 1b clinical trial of ezutromid in DMD patients, which we refer to as our Phase 1b modified diet trial, in which patients followed specific dietary guidance that recommended balanced proportions of fat, protein, and carbohydrates and dosing with a glass of whole milk. In our Phase 1b modified diet trial, while following specific dietary guidance, all of the patients in the trial achieved plasma levels of ezutromid that may be sufficient to modulate the production of utrophin protein and possibly result in clinical benefit. Nonetheless, while the results of our completed clinical trials to date suggest that diet may impact absorption of ezutromid, other disease related factors, such as abnormal gastrointestinal physiology, or other factors such as the level of activity of the liver

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## [Table of Contents](#)

enzyme CYP1A, may impact the absorption profile of DMD patients. Accordingly, it is possible that we will be unable to achieve plasma levels of ezutromid that are expected to bring therapeutic benefit in future clinical trials, and, in such a case, we will likely not be able to successfully complete the development of, obtain marketing approval for or commercialize this product candidate.

In addition, in our first Phase 1b clinical trial of ezutromid in DMD patients, patients experienced a statistically significant reduction in creatine kinase, or CK, and other enzyme markers of muscle damage following treatment with ezutromid. Although this was not a placebo controlled study and there may be other factors that influenced the results, we believed the lower levels of CK and the other enzymes compared to baseline potentially indicate a reduction in muscle damage and may be evidence of ezutromid activity. However, in our Phase 1b modified diet trial, we did not observe a change in the levels of CK when patients received ezutromid as compared to when patients received a placebo. Likewise, we may not observe changes in levels of CK or other enzyme markers of muscle damage in longer-term clinical trials.

If we are required to conduct additional clinical trials or other testing of ezutromid or ridinilazole or any other product candidate that we develop beyond those that we contemplate, if we are unable to successfully complete our clinical trials or other testing, if the results of these clinical trials or tests are not positive or are only modestly positive or if there are safety concerns, we may:

- be delayed in obtaining marketing approval for our product candidates;
- not obtain marketing approval at all;
- obtain approval for indications or patient populations that are not as broad as we intended or desired;
- obtain approval with labeling that includes significant use or distribution restrictions or safety warnings, including boxed warnings;
- be subject to additional post-marketing testing requirements or restrictions; or
- have the product removed from the market after obtaining marketing approval.

***If we experience any of a number of possible unforeseen events in connection with our clinical trials, potential marketing approval or commercialization of our product candidates could be delayed or prevented.***

We may experience numerous unforeseen events during, or as a result of, clinical trials that could delay or prevent our ability to receive marketing approval or commercialize our product candidates, including:

- clinical trials of our product candidates may produce negative or inconclusive results, and we may decide, or regulators may require us, to conduct additional clinical trials or abandon product development programs;
- the number of patients required for clinical trials of our product candidates may be larger than we anticipate, enrollment in these clinical trials may be slower than we anticipate or participants may drop out of these clinical trials at a higher rate than we anticipate;
- we may be unable to enroll a sufficient number of patients in our clinical trials to ensure adequate statistical power to detect any statistically significant treatment effects;
- our third-party contractors may fail to comply with regulatory requirements or meet their contractual obligations to us in a timely manner, or at all;
- regulators, institutional review boards or independent ethics committees may not authorize us or our investigators to commence a clinical trial or conduct a clinical trial at a prospective trial site;
- we may have delays in reaching or fail to reach agreement on acceptable clinical trial contracts or clinical trial protocols with prospective trial sites;
- we may have to suspend or terminate clinical trials of our product candidates for various reasons, including a finding that the participants are being exposed to unacceptable health risks;

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## Table of Contents

- regulators, institutional review boards or independent ethics committees may require that we or our investigators suspend or terminate clinical research for various reasons, including noncompliance with regulatory requirements or a finding that the participants are being exposed to unacceptable health risks;
- the cost of clinical trials of our product candidates may be greater than we anticipate;
- the supply or quality of our product candidates or other materials necessary to conduct clinical trials of our product candidates may be insufficient or inadequate; and
- our product candidates may have undesirable side effects or other unexpected characteristics, causing us or our investigators, regulators, institutional review boards or independent ethics committees to suspend or terminate the clinical trials.

Our product development costs will increase if we experience delays in testing or marketing approvals. We do not know whether any preclinical tests or clinical trials will begin as planned, will need to be restructured or will be completed on schedule, or at all. Significant preclinical or clinical trial delays also could shorten any periods during which we may have the exclusive right to commercialize our product candidates or allow our competitors to bring products to market before we do and impair our ability to successfully commercialize our product candidates and may harm our business and results of operations.

***Because we are developing ezutromid for the treatment of a disease in which there is little clinical experience, there is increased risk that the outcome of our clinical trials of ezutromid will not be favorable.***

There is currently only one approved therapy for the treatment of DMD, and this therapy treats DMD caused by a specific genetic mutation known as nonsense mutations. DMD caused by nonsense mutations affects approximately 13% of all DMD patients. Data on the natural clinical progression of DMD remains limited despite the recent publication of data from natural history studies on DMD patients. This has resulted in limited clinical trial experience for the development of drugs to treat DMD. In particular, regulatory authorities in the United States and European Union have not issued definitive guidance as to how to measure and achieve efficacy. As a result, the design and conduct of clinical trials for DMD is subject to increased risk.

In the last few years, a test of the distance walked by a patient in six minutes, commonly referred to as the six minute walk test, has been used as an endpoint in several clinical trials of product candidates for patients with DMD. It is viewed by U.S. and European regulators as the only primary outcome measure for DMD trials. We may nonetheless experience setbacks with our clinical trials for ezutromid or the clinical trials for our future product candidates for DMD because of the limited clinical experience in this indication. For example, regulators have not yet established what change in the distance walked in the six minute walk test is required to be demonstrated in a clinical trial of a DMD therapy in order to signify a clinically meaningful result or obtain marketing approvals. As a result, we may not achieve the pre-specified endpoint with statistical significance in clinical trials of ezutromid or of our other future product candidates for DMD, which would decrease the chance of obtaining marketing approval for ezutromid or our other future product candidates for DMD.

***Our focus on utrophin modulation as a potential treatment for DMD is unproven, and we do not know whether we will be able to develop any products of commercial value for this indication.***

Our scientific approach for treating DMD focuses on the discovery and development of utrophin modulators. There is no marketed drug that relies on utrophin modulation whereby the production of utrophin is maintained to compensate for the lack of dystrophin for the treatment of DMD or any other indication. As a result, we may not be able to replicate the results of our preclinical studies in our clinical trials of ezutromid, and our focus on targeting utrophin modulation may not result in the discovery and development of commercially viable drugs that safely and effectively treat DMD or other muscle-wasting disorders.

Moreover, we have not yet identified the level of utrophin modulation and associated production of utrophin needed to provide a clinical benefit to DMD patients. In our two completed Phase 1b clinical trials of ezutromid,

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## [Table of Contents](#)

we observed variable plasma levels of drug among patients. Although only a proportion of patients in each trial had plasma concentrations exceeding the concentration level that, based on the results of our preclinical studies, corresponds to a 50% increase in utrophin expression, we believe that all the patients may still have achieved plasma levels of ezutromid sufficient to modulate the production of utrophin to a lesser extent and possibly result in clinical benefit. This belief is based in part on the work of Professor Kay Davies and her research group at the University of Oxford, in which the continued expression of utrophin protein in the transgenic lines of an *mdx* mouse, even at levels just above those in a normal *mdx* mouse, had a meaningful, positive effect on muscle performance. Nonetheless, we do not know whether utrophin modulation has been achieved, and if it has, whether the level of utrophin modulation and production in fact resulted in a clinical benefit for these patients.

***If we experience delays or difficulties in the enrollment of patients in our clinical trials, our receipt of necessary marketing approvals could be delayed or prevented.***

We may not be able to initiate or continue clinical trials for our product candidates, including our ongoing and planned clinical trials of ezutromid and ridinilazole, if we are unable to locate and enroll a sufficient number of eligible patients to participate in these clinical trials. DMD is a rare disease with a relatively small patient population, which could result in slow enrollment of clinical trial participants. Because we expect that our current and planned clinical trials for DMD will be limited to boys in a specified age range and with a certain level of physical ability only, the number of patients eligible for our clinical trials is even smaller. Further, there are only a limited number of specialist physicians that treat DMD patients, and major clinical centers are concentrated in a few geographic regions. CDI is an acute infection that requires rapid diagnosis. For our clinical trials of ridinilazole, we need to identify potential patients, test them for CDI and enroll them on the clinical trial within a 24-hour period. In addition, our competitors in both DMD and CDI have ongoing clinical trials for product candidates that could be competitive with our product candidates, and patients who would otherwise be eligible for our clinical trials may instead enroll in clinical trials of our competitors' product candidates.

Patient enrollment is affected by other factors, including:

- severity of the disease under investigation;
- eligibility criteria for the clinical trial in question;
- perceived risks and benefits of the product candidate under study;
- approval of other therapies to treat the indication that is being investigated in the clinical trial;
- efforts to facilitate timely enrollment in clinical trials;
- patient referral practices of physicians;
- the ability to monitor patients adequately during and after treatment; and
- proximity and availability of clinical trial sites for prospective patients.

Enrollment delays in our clinical trials may result in increased development costs for our product candidates, which would cause the value of our company to decline and limit our ability to obtain additional financing. Our inability to enroll a sufficient number of patients in our ongoing and planned clinical trials of ezutromid and ridinilazole or any of our other clinical trials would result in significant delays or may require us to abandon one or more clinical trials altogether.

***If serious adverse or inappropriate side effects are identified during the development of ezutromid or ridinilazole or any other product candidate, we may need to abandon or limit our development of that product candidate.***

All of our product candidates are in clinical or preclinical development and their risk of failure is high. It is impossible to predict when or if any of our product candidates will prove effective or safe in humans or will receive marketing approval. If our product candidates are associated with undesirable side effects or have

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## [Table of Contents](#)

characteristics that are unexpected, we may need to abandon their development or limit development to certain uses or subpopulations in which the undesirable side effects or other characteristics are less prevalent, less severe or more acceptable from a risk-benefit perspective. Many compounds that initially showed promise in clinical or earlier stage testing have later been found to cause side effects or other safety issues that prevented further development of the compound.

***Even if ezutromid or ridinilazole or any other product candidate receives marketing approval, it may fail to achieve the degree of market acceptance by physicians, patients, third-party payors and others in the medical community necessary for commercial success.***

If ezutromid, ridinilazole or any of our other future product candidates receive marketing approval, such products may nonetheless fail to gain sufficient market acceptance by physicians, patients, third-party payors and others in the medical community. If these products do not achieve an adequate level of acceptance, we may not generate significant product revenues or any profits from operations. The degree of market acceptance of our product candidates, if approved for commercial sale, will depend on a number of factors, including:

- the efficacy and potential advantages compared to alternative treatments or competitive products;
- the prevalence and severity of any side effects;
- the ability to offer our product candidates for sale at competitive prices, including in the case of ridinilazole, which we expect, if approved, will compete with vancomycin and metronidazole, both of which are available in generic form at low prices, and the recently launched antibiotic, fidaxomicin;
- convenience and ease of administration compared to alternative treatments;
- the willingness of the target patient population to try new therapies and of physicians to prescribe these therapies;
- the strength of marketing and distribution support;
- the availability of third-party coverage and adequate reimbursement;
- the timing of any such marketing approval in relation to other product approvals;
- support from patient advocacy groups; and
- any restrictions on concomitant use of other medications.

Our ability to negotiate, secure and maintain third-party coverage and reimbursement may be affected by political, economic and regulatory developments in the United States, the European Union and other jurisdictions. Governments continue to impose cost containment measures, and third-party payors are increasingly challenging prices charged for medicines and examining their cost effectiveness, in addition to their safety and efficacy. These and other similar developments could significantly limit the degree of market acceptance of ezutromid or ridinilazole or any of our other future product candidates that receive marketing approval.

***If we are unable to establish sales and marketing capabilities or enter into agreements with third parties to market and sell our product candidates, we may not be successful in commercializing ezutromid or ridinilazole or any other product candidate if and when such product candidates are approved.***

We do not have a sales or marketing infrastructure and have no experience in the sale or marketing of pharmaceutical products. To achieve commercial success for any approved product, we must either develop a sales and marketing organization or outsource these functions to third parties. If ezutromid receives marketing approval, we intend to commercialize it initially in the United States and Europe with our own focused, specialized sales force. Outside of the United States and Europe, we plan to evaluate the potential for utilizing collaboration, distribution and other marketing arrangements with third parties to commercialize ezutromid. We may determine to commercialize ridinilazole directly in the United States and Europe with our own specialized

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## [Table of Contents](#)

sales force or seek third-party collaborators for the development and commercialization of ridinilazole. There are risks involved with establishing our own sales and marketing capabilities and entering into arrangements with third parties to perform these services. For example, recruiting and training a sales force is expensive and time-consuming and could delay any product launch. If the commercial launch of a product candidate for which we recruit a sales force and establish marketing capabilities is delayed or does not occur for any reason, we would have prematurely or unnecessarily incurred these commercialization expenses. This may be costly, and our investment would be lost if we cannot retain or reposition our sales and marketing personnel.

Factors that may inhibit our efforts to commercialize our products on our own include:

- our inability to recruit, train and retain adequate numbers of effective sales and marketing personnel;
- the inability of sales personnel to obtain access to or persuade adequate numbers of physicians to prescribe any future products;
- the lack of complementary products to be offered by sales personnel, which may put us at a competitive disadvantage relative to companies with more extensive product lines; and
- unforeseen costs and expenses associated with creating an independent sales and marketing organization.

If we enter into arrangements with third parties to perform sales and marketing services, our product revenues or the profitability of these product revenues to us are likely to be lower than if we were to market and sell any products that we develop ourselves. In addition, we may not be successful in entering into arrangements with third parties to sell and market our product candidates or may be unable to do so on terms that are acceptable to us. We likely will have little control over such third parties, and any of them may fail to devote the necessary resources and attention to sell and market our products effectively. If we do not establish sales and marketing capabilities successfully, either on our own or in collaboration with third parties, we will not be successful in commercializing our product candidates.

***We face substantial competition, which may result in others discovering, developing or commercializing products before or more successfully than we do.***

The development and commercialization of new drug products is highly competitive. We face competition with respect to our current product candidates and any products we may seek to develop or commercialize in the future from major pharmaceutical companies, specialty pharmaceutical companies and biotechnology companies worldwide.

There is currently no approved therapy for the treatment of DMD applicable to all DMD patients that seeks to alter the progression of the disease. Corticosteroids are the current standard of care for DMD patients, although these are symptomatic treatments that do not address the underlying cause of DMD. PTC Therapeutics, Inc. is developing ataluren (Translarna™), which is a small molecule that enables formation of functional dystrophin in DMD patients with nonsense mutations. DMD caused by nonsense mutations affects approximately 13% of all DMD patients. The European Commission has granted conditional approval for ataluren in Europe, and PTC is commercializing ataluren in several European countries. Other biopharmaceutical companies, including BioMarin Pharmaceutical Inc., following their recent acquisition of Prosensa Holding N.V., and Sarepta Therapeutics, Inc., are developing treatments for DMD based on exon-skipping approaches. We believe that there are exon-skipping therapies currently in clinical development to address four of these exons and that skipping of these exons would treat in the aggregate less than one-third of all DMD patients. A number of other companies are pursuing alternative therapeutic approaches for the treatment of DMD, including Pfizer, Inc. and Bristol-Myers Squibb Company, which are pursuing an approach based on muscle tissue growth through myostatin inhibition. For more information, see “Business—Competition” in this Annual Report. We believe that our approach of utrophin modulation has the potential to treat the entire population of DMD patients, unlike other DMD approaches that also seek to alter the progression of the disease but only address subsets of the total DMD population. We expect the price that we will charge for ezutromid, if approved, will reflect its status as an orphan drug that will be directed at a smaller population of patients.



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## [Table of Contents](#)

Several pharmaceutical and biotechnology companies have established themselves in the market for the treatment of CDI, and several additional companies are developing products for the treatment of CDI. The current standard of care for CDI is treatment with the broad spectrum antibiotics vancomycin and metronidazole, both of which are available in generic form in the United States. Generic antibiotic therapies typically are sold at lower prices than branded antibiotics and generally are preferred by managed care providers of health services. The antibiotic fidaxomicin (Dificid™ in the United States and Difclir™ in Europe), which is marketed in the United States by Cubist Pharmaceuticals, Inc., or Cubist, a wholly owned subsidiary of Merck & Co., Inc. and in Europe by Astellas Pharma Inc., was recently approved for treatment of CDI in the United States and the European Union. Other antibiotics in late-stage clinical trials include cadazolid, which is being developed by Actelion Pharmaceuticals Limited and is currently in Phase 3 clinical development and surotomycin, which was originally developed by Cubist and later acquired by Merck. Merck reported that it had received unfavorable efficacy data from a Phase 3 clinical trial for surotomycin in August 2015. A number of other approaches for the treatment of CDI are in development, including monoclonal antibodies, a vaccine and fecal biotherapy. For more information, see “Business—Competition” in this Annual Report.

Potential competitors also include academic institutions, government agencies and other public and private research organizations that conduct research, seek patent protection and establish collaborative arrangements for research, development, manufacturing and commercialization. Our commercial opportunity could be reduced or eliminated if our competitors develop and commercialize products that are more effective, safer, have fewer or less severe side effects, are approved for broader indications or patient populations, or are more convenient or less expensive than any products that we develop and commercialize. Our competitors may also obtain marketing approval for their products more rapidly than we may obtain approval for ours, which could result in our competitors establishing a strong market position before we are able to enter the market.

We believe that many competitors are attempting to develop therapeutics for the target indications of our product candidates, including academic institutions, government agencies, public and private research organizations, large pharmaceutical companies and smaller more focused companies.

Many of our competitors may have significantly greater financial resources and expertise in research and development, manufacturing, preclinical testing, conducting clinical trials, obtaining approvals from regulatory authorities and marketing approved products than we do. Mergers and acquisitions in the pharmaceutical and biotechnology industries may result in even more resources being concentrated among a smaller number of our competitors. Smaller and other early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These third parties compete with us in recruiting and retaining qualified scientific and management personnel, establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies complementary to or necessary for our programs.

***Even if we are able to commercialize ezutromid, ridinilazole or any other product candidate that we develop, the product may become subject to unfavorable pricing regulations, third-party reimbursement practices or healthcare reform initiatives, which would harm our business.***

The regulations that govern marketing approvals, pricing, coverage and reimbursement for new drug products vary widely from country to country. Current and future legislation may significantly change the approval requirements in ways that could involve additional costs and cause delays in obtaining approvals. Some countries require approval of the sale price of a drug before it can be marketed. In many countries, the pricing review period begins after marketing or product licensing approval is granted. In some foreign markets, prescription pharmaceutical pricing remains subject to continuing governmental control even after initial approval is granted. As a result, we might obtain marketing approval for a product in a particular country, but then be subject to price regulations that delay our commercial launch of the product, possibly for lengthy time periods, and negatively impact the revenues we are able to generate from the sale of the product in that country. Adverse pricing limitations may hinder our ability to recoup our investment in one or more product candidates, even if our product candidates obtain marketing approval.

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## [Table of Contents](#)

Our ability to commercialize ezutromid, ridinilazole or any other product candidate successfully also will depend in part on the extent to which coverage and adequate reimbursement for these products and related treatments will be available from government health administration authorities, private health insurers and other organizations. Government authorities and other third-party payors, such as private health insurers and health maintenance organizations, decide which medications they will pay for and establish reimbursement levels. A primary trend in the E.U. and U.S. healthcare industries and elsewhere is cost containment. Government authorities and other third-party payors have attempted to control costs by limiting coverage and the amount of reimbursement for particular medications. Increasingly, third-party payors are requiring that drug companies provide them with predetermined discounts from list prices and are challenging the prices charged for medical products. We cannot be sure that coverage and reimbursement will be available for ezutromid, ridinilazole or any other product that we commercialize and, if coverage and reimbursement are available, the level of reimbursement. Reimbursement may impact the demand for, or the price of, any product candidate for which we obtain marketing approval. Obtaining and maintaining adequate reimbursement for ezutromid may be particularly difficult because of the higher prices typically associated with drugs directed at smaller populations of patients. In addition, third-party payors are likely to impose strict requirements for reimbursement of a higher priced drug. If reimbursement is not available or is available only to limited levels, we may not be able to successfully commercialize any product candidate for which we obtain marketing approval.

There may be significant delays in obtaining coverage and reimbursement for newly approved drugs, and coverage may be more limited than the purposes for which the drug is approved by the applicable regulatory authority. Moreover, eligibility for coverage and reimbursement does not imply that any drug will be paid for in all cases or at a rate that covers our costs, including research, development, intellectual property, manufacture, sale and distribution expenses. Interim reimbursement levels for new drugs, if applicable, may also not be sufficient to cover our costs and may not be made permanent. Reimbursement rates may vary according to the use of the drug and the clinical setting in which it is used, may be based on reimbursement levels already set for lower cost drugs, and may be incorporated into existing payments for other services. Net prices for drugs may be reduced by mandatory discounts or rebates required by government healthcare programs or private payors and by any future relaxation of laws that presently restrict imports of drugs from countries where they may be sold at lower prices than in the United States. In the United States, third-party payors often rely upon Medicare coverage policy and payment limitations in setting their own reimbursement policies. In the European Union, reference pricing systems and other measures may lead to cost containment and reduced prices. Our inability to promptly obtain coverage and adequate reimbursement rates from both government-funded and private payors for any approved products that we develop could have a material adverse effect on our operating results, our ability to raise capital needed to commercialize products and our overall financial condition.

### ***Governments outside the United States tend to impose strict price controls, which may adversely affect our revenues, if any.***

In some countries, particularly the member states of the European Union, the pricing of prescription pharmaceuticals is subject to governmental control. In these countries, pricing negotiations with governmental authorities can take considerable time after the receipt of marketing approval for a product. In addition, there can be considerable pressure by governments and other stakeholders on prices and reimbursement levels, including as part of cost containment measures. Political, economic and regulatory developments may further complicate pricing negotiations, and pricing negotiations may continue after reimbursement has been obtained. Reference pricing used by various E.U. member states and parallel distribution, or arbitrage between low-priced and high-priced member states, can further reduce prices. In some countries, we may be required to conduct a clinical trial or other studies that compare the cost-effectiveness of our product candidate to other available therapies in order to obtain or maintain reimbursement or pricing approval. Publication of discounts by third-party payors or authorities may lead to further pressure on prices or reimbursement levels within the country of publication and other countries. If reimbursement of our products is unavailable or limited in scope or amount, or if pricing is set at unsatisfactory levels, our business could be adversely affected.

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## [Table of Contents](#)

### ***Product liability lawsuits against us could cause us to incur substantial liabilities and to limit commercialization of any products that we may develop.***

We face an inherent risk of product liability exposure related to the testing of our product candidates in human clinical trials and will face an even greater risk if we commercially sell any products that we may develop. If we cannot successfully defend ourselves against claims that our product candidates or products caused injuries, we will incur substantial liabilities. Regardless of merit or eventual outcome, liability claims may result in:

- reduced resources of our management to pursue our business strategy;
- decreased demand for any product candidates or products that we may develop;
- injury to our reputation and significant negative media attention;
- withdrawal of clinical trial participants;
- significant costs to defend the related litigation;
- substantial monetary awards to clinical trial participants or patients;
- loss of revenue;
- increased insurance costs; and
- the inability to commercialize any products that we may develop.

We have separate product liability insurance policies that cover each of our clinical trials. These policies each provide coverage of up to £5.0 million in the aggregate for clinical trials, or portions thereof, conducted in Europe and up to \$5.0 million in the aggregate for clinical trials, or portions thereof, conducted in the United States. The insurance policies covering our clinical trials in the United States are also subject to a per claim deductible. The amount of insurance that we currently hold may not be adequate to cover all liabilities that we may incur. We will need to increase our insurance coverage when and if we begin commercializing ezutromid, ridinilazole or any other product candidate that receives marketing approval. Insurance coverage is increasingly expensive. We may not be able to maintain insurance coverage at a reasonable cost or in an amount adequate to satisfy any liability that may arise.

### ***If we fail to comply with environmental, health and safety laws and regulations, we could become subject to fines or penalties or incur costs that could have a material adverse effect on the success of our business.***

We are subject to numerous environmental, health and safety laws and regulations, including those governing laboratory procedures and the handling, use, storage, treatment and disposal of hazardous materials and wastes. Our operations currently, and may in the future, involve the use of hazardous and flammable materials, including chemicals and medical and biological materials, and produce hazardous waste products. Even if we contract with third parties for the disposal of these materials and wastes, we cannot eliminate the risk of contamination or injury from these materials. In the event of contamination or injury resulting from our use of hazardous materials or disposal of hazardous wastes, we could be held liable for any resulting damages, and any liability could exceed our resources.

Although we maintain workers' compensation insurance to cover us for costs and expenses we may incur due to injuries to our employees resulting from the use of hazardous materials, this insurance may not provide adequate coverage against potential liabilities. We also maintain liability insurance for some of these risks, but our policy has a coverage limit of £5.0 million per occurrence.

In addition, we may incur substantial costs in order to comply with current or future environmental, health and safety laws and regulations. These current or future laws and regulations may impair our research, development or production efforts. Failure to comply with these laws and regulations also may result in substantial fines, penalties or other sanctions.

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## [Table of Contents](#)

***We may expend our limited resources to pursue a particular product candidate and fail to capitalize on product candidates that may be more profitable or for which there is a greater likelihood of success.***

Because we have limited financial and managerial resources, we focus on specific product candidates. As a result, we may forego or delay pursuit of opportunities with other product candidates that later prove to have greater commercial potential. Our resource allocation decisions may cause us to fail to capitalize on viable commercial products or profitable market opportunities. Our spending on current and future research and development programs and product candidates may not yield any commercially viable products.

We have based our research and development efforts for DMD on utrophin modulators, including ezutromid, a potential optimized formulation of ezutromid, our second generation utrophin modulators and future generation utrophin modulators, and for CDI on ridinilazole. Notwithstanding our large investment to date and anticipated future expenditures in proprietary technologies that we use in the discovery of product candidates for DMD and CDI, we have not yet developed, and may never successfully develop, any marketed drugs using this approach. As a result of pursuing the development of product candidates using our proprietary technologies, we may fail to develop product candidates or address indications based on other scientific approaches that may offer greater commercial potential or for which there is a greater likelihood of success. Research programs to identify new product candidates require substantial technical, financial and human resources. These research programs may initially show promise in identifying potential product candidates, yet fail to yield product candidates for clinical development.

If we do not accurately evaluate the commercial potential or target market for a particular product candidate, we may relinquish valuable rights to that product candidate through collaboration, licensing or other royalty arrangements in cases in which it would have been more advantageous for us to retain sole development and commercialization rights to such product candidate.

### **Risks Related to our Dependence on Third Parties**

***Use of third parties to manufacture our product candidates may increase the risk that we will not have sufficient quantities of our product candidates or products or such quantities at an acceptable cost, which could delay, prevent or impair our development or commercialization efforts.***

We do not own or operate manufacturing facilities for the production of clinical or commercial supplies of our product candidates. We have limited personnel with experience in drug manufacturing and lack the resources and the capabilities to manufacture any of our product candidates on a clinical or commercial scale. We currently rely on third parties for supply of the active pharmaceutical ingredients, or API, in our product candidates. Our strategy is to outsource all manufacturing of our product candidates and products to third parties.

We do not currently have any agreements with third-party manufacturers for the long-term clinical or commercial supply of any of our product candidates. We currently engage a single third-party manufacturer to provide clinical material of the API and fill and finish services for the final drug product formulation of ezutromid that is being used in our clinical trials. A second third-party clinical supplier is responsible for the labelling and shipping of the final drug product to the clinical trial sites. We are engaged with a different drug product supplier to provide final drug product of the optimized formulation of ezutromid that is being evaluated in our ongoing Phase 1 clinical trial. For ridinilazole, we engage two other third-party manufacturers to provide clinical material of the API and fill and finish services to supply final drug product that is used in our on-going clinical trials. A third supplier is engaged to provide packaging, labelling and distribution services for the ongoing Phase 2 clinical trial. We may be unable to conclude agreements for commercial supply with third-party manufacturers, or may be unable to do so on acceptable terms.

Even if we are able to establish and maintain arrangements with third-party manufacturers, reliance on third-party manufacturers entails additional risks, including:

- reliance on the third party for regulatory compliance and quality assurance;
- the possible breach of the manufacturing agreement by the third party;

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## Table of Contents

- the possible misappropriation of our proprietary information, including our trade secrets and know-how; and
- the possible termination or nonrenewal of the agreement by the third party at a time that is costly or inconvenient for us.

Third-party manufacturers may not be able to comply with current good manufacturing practice, or cGMP, regulations or similar regulatory requirements outside the United States. Our failure, or the failure of our third-party manufacturers, to comply with applicable regulations could result in sanctions being imposed on us, including fines, injunctions, civil penalties, delays, suspension or withdrawal of approvals, license revocation, seizures or recalls of product candidates or products, operating restrictions and criminal prosecutions, any of which could significantly and adversely affect supplies of our product candidates.

Our product candidates and any products that we may develop may compete with other product candidates and products for access to manufacturing facilities. There are a limited number of manufacturers that operate under cGMP regulations and that might be capable of manufacturing for us.

If the third parties that we engage to manufacture product for our preclinical tests and clinical trials should cease to continue to do so for any reason, we likely would experience delays in advancing these clinical trials while we identify and qualify replacement suppliers and we may be unable to obtain replacement supplies on terms that are favorable to us. In addition, if we are not able to obtain adequate supplies of our product candidates or the drug substances used to manufacture them, it will be more difficult for us to develop our product candidates and compete effectively.

Our current and anticipated future dependence upon others for the manufacture of our product candidates may adversely affect our future profit margins and our ability to develop product candidates and commercialize any products that receive marketing approval on a timely and competitive basis.

***We rely on third parties to conduct our clinical trials and those third parties may not perform satisfactorily, including failing to meet deadlines for the completion of such clinical trials.***

We do not independently conduct clinical trials for our product candidates. We rely on third parties, such as contract research organizations, clinical data management organizations, medical institutions and clinical investigators, to perform this function. Any of these third parties may terminate their engagements with us at any time. If we need to enter into alternative arrangements, it would delay our product development activities.

Our reliance on these third parties for clinical development activities reduces our control over these activities but does not relieve us of our responsibilities. For example, we remain responsible for ensuring that each of our clinical trials is conducted in accordance with the general investigational plan and protocols for the clinical trial. Moreover, the FDA requires us to comply with standards, commonly referred to as Good Clinical Practice, or GCP, for conducting, recording and reporting the results of clinical trials to assure that data and reported results are credible and accurate and that the rights, integrity of data and confidentiality of clinical trial participants are protected. We also are required to register ongoing clinical trials and post the results of completed clinical trials on a U.S. government-sponsored database, [www.ClinicalTrials.gov](http://www.ClinicalTrials.gov), within certain timeframes. Failure to do so can result in fines, adverse publicity and civil and criminal sanctions. Similar GCP and transparency requirements apply in the European Union. The U.S. National Institutes of Health also recently announced plans to require sponsors to post results of clinical trials for unapproved products, including unfavorable results in clinical trials for unapproved uses of approved products.

Furthermore, third parties that we rely on for our clinical development activities may also have relationships with other entities, some of which may be our competitors. If these third parties do not successfully carry out their contractual duties, meet expected deadlines or conduct our clinical trials in accordance with regulatory

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## [Table of Contents](#)

requirements or our stated protocols, we will not be able to obtain, or may be delayed in obtaining, marketing approvals for our product candidates and will not be able to, or may be delayed in our efforts to, successfully commercialize our product candidates. Our product development costs will increase if we experience delays in testing or obtaining marketing approvals.

We also rely on other third parties to store and distribute drug supplies for our clinical trials. Any performance failure on the part of our distributors could delay clinical development or marketing approval of our product candidates or commercialization of our products, producing additional losses and depriving us of potential product revenue.

***Our ability to identify and develop future generations of utrophin modulators depends on our strategic alliance with the University of Oxford. If we fail to maintain our current strategic relationship with the University of Oxford, our business prospects may be materially adversely affected.***

We have formed a strategic alliance with the University of Oxford pursuant to which we acquired an exclusive option to license intellectual property that is generated as part of our research in utrophin modulation. The goal of our strategic alliance with the University of Oxford is to identify and develop future generations of utrophin modulators that will include new mechanisms that could complement ezutromid and our second generation modulators. We rely on this strategic alliance and the University of Oxford to help identify and develop future generations of utrophin modulators. The continuation of a good relationship with the University of Oxford is important to our discovery and research efforts in this area. If our relationship with the University of Oxford deteriorates, if the University of Oxford fails to devote sufficient resources to the strategic alliance or if the University of Oxford challenges our option to license any intellectual property generated as part of the strategic alliance, our business prospects could be materially adversely affected.

***We may depend on collaborations with third parties for the development and commercialization of some of our product candidates. If those collaborations are not successful, we may not be able to capitalize on the market potential of these product candidates.***

Although we are evaluating our options to maximize the commercial opportunity for ridinilazole, including the relative merits of retaining commercialization rights for ourselves, our preference is to seek a third-party collaborator for ridinilazole. In addition, although we expect to commercialize ezutromid ourselves in the United States and Europe, we plan to evaluate the potential for utilizing collaboration, distribution and other marketing arrangements with third parties to commercialize ezutromid in other geographies. Moreover, we may seek third-party collaborators for development and commercialization of any future product candidates.

Our likely collaborators for any marketing, distribution, development, licensing or broader collaboration arrangements include large and mid-size pharmaceutical companies, regional and national pharmaceutical companies and biotechnology companies. We are not currently party to any such arrangement for ezutromid or ridinilazole. However, if we do enter into any such arrangements with any third parties in the future, we will likely have limited control over the amount and timing of resources that our collaborators dedicate to the development or commercialization of our product candidates. Our ability to generate revenues from these arrangements will depend on our collaborators' abilities and efforts to successfully perform the functions assigned to them in these arrangements.

Collaborations involving our product candidates would pose numerous risks to us, including the following:

- collaborators have significant discretion in determining the efforts and resources that they will apply to these collaborations and may not perform their obligations as expected;
- collaborators may deemphasize or not pursue development and commercialization of our product candidates or may elect not to continue or renew development or commercialization programs based on clinical trial results, changes in the collaborators' strategic focus, including as a result of a sale or disposition of a business unit or development function, or available funding, or external factors such as an acquisition that diverts resources or creates competing priorities;

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## Table of Contents

- collaborators may delay clinical trials, provide insufficient funding for a clinical trial program, stop a clinical trial or abandon a product candidate, repeat or conduct new clinical trials or require a new formulation of a product candidate for clinical testing;
- collaborators could independently develop, or develop with third parties, products that compete directly or indirectly with our products or product candidates if the collaborators believe that competitive products are more likely to be successfully developed or can be commercialized under terms that are more economically attractive than ours;
- a collaborator with marketing and distribution rights to multiple products may not commit sufficient resources to the marketing and distribution of our product relative to other products;
- collaborators may not properly maintain or defend our intellectual property rights or may use our proprietary information in such a way as to invite litigation that could jeopardize or invalidate our intellectual property or proprietary information or expose us to potential litigation;
- collaborators may infringe the intellectual property rights of third parties, which may expose us to litigation and potential liability;
- disputes may arise between the collaborator and us as to the ownership of intellectual property arising during the collaboration;
- we may grant exclusive rights to our collaborators, which would prevent us from collaborating with others;
- disputes may arise between the collaborators and us that result in the delay or termination of the research, development or commercialization of our products or product candidates or that result in costly litigation or arbitration that diverts management attention and resources; and
- collaborations may be terminated and, if terminated, may result in a need for additional capital to pursue further development or commercialization of the applicable product candidates.

For example, in 2009, we assigned certain technology relating to our DMD program to BioMarin. BioMarin conducted a Phase I clinical trial of a prior formulation of ezutromid in 48 healthy adult volunteers. In this clinical trial, subjects achieved low systemic exposure of the drug and there was variability of systemic exposure across subjects. Following this clinical trial of a prior formulation of ezutromid, BioMarin elected not to continue development of our assigned technology, citing pharmaceutical and pharmacokinetic challenges. In public statements, BioMarin indicated that it had concluded that the likelihood of achieving a therapeutic effect in DMD patients was highly unlikely. In 2010, BioMarin transferred the assets, and all commercialization rights, back to us.

Collaboration agreements may not lead to development or commercialization of product candidates in the most efficient manner or at all. If a collaborator of ours were to be involved in a business combination, the continued pursuit and emphasis on our product development or commercialization program could be delayed, diminished or terminated.

***If we are not able to establish additional collaborations, we may have to alter our development and commercialization plans.***

Our product development programs and the potential commercialization of our product candidates will require substantial additional cash to fund expenses. For some of our product candidates, we may decide to collaborate further with pharmaceutical and biotechnology companies for the development and potential commercialization of those product candidates.

We face significant competition in seeking appropriate collaborators. Whether we reach a definitive agreement for a collaboration will depend, among other things, upon our assessment of the collaborator's resources and expertise, the terms and conditions of the proposed collaboration and the proposed collaborator's

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## [Table of Contents](#)

evaluation of a number of factors. Those factors may include the design or results of clinical trials, the likelihood of approval by regulatory authorities, the potential market for the subject product candidate, the costs and complexities of manufacturing and delivering such product candidate to patients, the potential of competing products, the existence of uncertainty with respect to our ownership of technology, which can exist if there is a challenge to such ownership without regard to the merits of the challenge; and industry and market conditions generally. The collaborator may also consider alternative product candidates or technologies for similar indications that may be available to collaborate on and whether such a collaboration could be more attractive than the one with us for our product candidate. We may also be restricted under future license agreements from entering into agreements on certain terms with potential collaborators. Collaborations are complex and time-consuming to negotiate and document. In addition, there have been a significant number of recent business combinations among large pharmaceutical companies that have resulted in a reduced number of potential future collaborators and changes to the strategies of the combined company.

We may not be able to negotiate collaborations on a timely basis, on acceptable terms, or at all. If we are unable to do so, we may have to curtail the development of a product candidate, reduce or delay its development program or one or more of our other development programs, delay its potential commercialization or reduce the scope of any sales or marketing activities, or increase our expenditures and undertake development or commercialization activities at our own expense. If we elect to increase our expenditures to fund development or commercialization activities on our own, we may need to obtain additional capital, which may not be available to us on acceptable terms or at all. If we do not have sufficient funds, we may not be able to further develop our product candidates or bring them to market and generate product revenue.

***If we fail to comply with our obligations in our funding arrangements with third parties, we could be required to repay the grant funding we have received or grant to these third parties rights under certain of our intellectual property.***

We have received grant funding for some of our development programs from philanthropic, non-government and not for profit organizations and patient advocacy groups pursuant to agreements that impose development and commercialization diligence obligations on us. If we fail to comply with these obligations, in certain instances the applicable organization could require us to repay the grant funding we have received with interest or grant to the organization rights under certain of our intellectual property, which could materially adversely affect the value to us of product candidates covered by that intellectual property even if we are entitled to a share of any consideration received by such organization in connection with any subsequent development or commercialization of the product candidates.

### **Risks Related to our Intellectual Property**

***If we are unable to obtain and maintain patent protection for our technology and products, or if the scope of the patent protection is not sufficiently broad, our competitors could develop and commercialize technology and products similar or identical to ours, and our ability to successfully commercialize our technology and products may be adversely affected.***

Our success depends in large part on our ability to obtain and maintain patent protection in the United States and other countries with respect to our proprietary technology and products. We seek to protect our proprietary position by filing patent applications in the United States, in Europe and in certain additional foreign jurisdictions related to our novel technologies and product candidates that are important to our business. This process is expensive and time-consuming, and we may not be able to file and prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner. It is also possible that we will fail to identify patentable aspects of our research and development output before it is too late to obtain patent protection. Moreover, if we license technology or product candidates from third parties in the future, these license agreements may not permit us to control the preparation, filing and prosecution of patent applications, or to maintain or enforce the patents, covering the licensed technology or product candidates. These agreements could also give our licensors the right



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## [Table of Contents](#)

to enforce the licensed patents without our involvement, or to decide not to enforce the patents at all. Therefore, in these circumstances, these patents and applications may not be prosecuted or enforced in a manner consistent with the best interests of our business.

The patent position of biotechnology and pharmaceutical companies generally is highly uncertain, involves complex legal and factual questions and has in recent years been the subject of much litigation. As a result, the issuance, scope, validity, enforceability and commercial value of our patent rights are highly uncertain. Our pending and future patent applications may not result in patents being issued which protect our technology or products, in whole or in part, or which effectively prevent others from commercializing competitive technologies and products. Changes in either the patent laws or interpretation of the patent laws in the United States and other countries may diminish the value of our patents, narrow the scope of our patent protection or make enforcement more difficult or uncertain.

The laws of foreign countries may not protect our patent rights to the same extent as the laws of the United States. For example, European patent law restricts the patentability of methods of treatment of the human body more than U.S. law does. In addition, for the foregoing reasons, we may not pursue or obtain patent protection in all major markets or may not obtain protection that enables us to prevent the entry of third parties into the market.

Assuming the other requirements for patentability are met, currently, the first to file a patent application is generally entitled to the patent. However, prior to March 16, 2013, in the United States, the first to invent was entitled to the patent. Publications of discoveries in the scientific literature often lag behind the actual discoveries, and patent applications in the United States and other jurisdictions are typically not published until 18 months after filing, or in some cases not at all. Therefore, we cannot know with certainty whether we were the first to make the inventions claimed in our U.S. patents or pending U.S. patent applications, or that we were the first to file for patent protection of such inventions outside the United States or, since March 16, 2013, within the United States.

Moreover, we may be subject to a third party preissuance submission of prior art to the U.S. Patent and Trademark Office, or the USPTO, or become involved in opposition, derivation, reexamination, reissue, inter partes review, post grant review, interference proceedings or other patent office proceedings, court litigation or International Trade Commission proceedings, in the United States or elsewhere, challenging our patent rights or the patent rights of others. An adverse determination in any such submission, proceeding or litigation concerning our patent rights could reduce the scope of or prevent the enforceability of, or invalidate, our patent rights, allowing third parties to commercialize our technology or products, or equivalent or similar technology or products, and so to compete directly with us, without payment to us, or, where such proceedings involve third-party patents, result in our inability to manufacture or commercialize products without infringing third-party patent rights. In addition, if the breadth or strength of protection provided by our patents and patent applications is threatened or narrowed by operation of any of the foregoing, such an event could dissuade companies from collaborating with us to license, develop or commercialize current or future product candidates.

Even if our patent applications issue as patents, they may not issue in a form that will provide us with adequate protection to prevent competitors from competing with us or otherwise to provide us with any competitive advantage. Our competitors may be able to circumvent our owned or licensed patents by developing similar, improved or alternative technologies or products in a non-infringing manner.

For example, although ridinilazole is protected by a U.S. composition of matter patent that recites hydrated forms of ridinilazole and a pharmaceutically acceptable excipient, and a method of treatment patent for *Clostridium difficile* associated disease, patent protection is not available for composition-of-matter claims that only recite the active pharmaceutical ingredient for ridinilazole without limitation to its use. Because ridinilazole lacks composition-of-matter protection for its active pharmaceutical ingredient, competitors will, subject to obtaining marketing approval, be able to offer and sell products with the same active pharmaceutical ingredient so long as these competitors do not infringe any other issued patents that would otherwise cover the drug's usage,

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## [Table of Contents](#)

methods of treatment using the drug, drug formulations, drug dosage forms and the like. Moreover, method-of-treatment patent claims are more difficult to enforce than composition-of-matter claims for reasons including off-label sale, potential divided infringement issues and use of the subject compound in non-infringing manners. Physicians are permitted to prescribe an approved product for uses that are not described in the product's labeling. Although off-label prescriptions may infringe our method-of-treatment patents, the practice is common across medical specialties and such infringement is difficult to prevent or prosecute. Off-label sales would limit our ability to generate revenue from the sale of our product candidates, if approved for commercial sale. In addition, if a third party were able to design around our dosage-form and formulation patents and create a different formulation and dosage form that is not covered by our patents or patent applications, we would likely be unable to prevent that third party from manufacturing and marketing its product.

In addition, other companies may attempt to circumvent any regulatory data protection or market exclusivity, such as orphan drug exclusivity in the United States, which we obtain under applicable legislation, which may require us to allocate significant resources to preventing such circumvention. Legal and regulatory developments in the European Union and elsewhere may also result in clinical trial data submitted as part of a marketing authorization application becoming publicly available. Such developments could enable other companies to use our clinical trial data to assist in their own product development and to obtain marketing authorizations in the European Union and in other jurisdictions. Such developments may also require us to allocate significant resources to prevent other companies from circumventing or violating our intellectual property rights. Our attempts to prevent third parties from circumventing our intellectual property and other rights may ultimately be unsuccessful. We may also fail to take the required actions or pay the necessary fees to maintain our patents.

The issuance of a patent is not conclusive as to its inventorship, scope, validity or enforceability, and our owned and licensed patents may be challenged in the courts or patent offices in the United States and abroad. Such challenges may result in loss of exclusivity or in patent claims being narrowed, invalidated or held unenforceable, in whole or in part, which could limit our ability to stop others from using or commercializing similar or identical technology and products, or limit the duration of the patent protection of our technology and products. Future changes in U.S. statutory or case law beyond our control could affect some or all of the foregoing possibilities. Given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized. This could be the case even after giving effect to patent term extensions and data exclusivity provisions preventing third parties from relying on clinical trial data filed by us for regulatory approval in support of their own applications for such approval. As a result, our patent portfolio may not provide us with sufficient rights to exclude others from commercializing products similar or identical to ours.

***We may become involved in lawsuits or other enforcement proceedings to protect or enforce our patents or other intellectual property, which could be expensive, time-consuming and potentially unsuccessful.***

Competitors may infringe our patents, trademarks, copyrights or other intellectual property. To counter infringement or unauthorized use, we may be required to file claims, which can be expensive and time-consuming. Any claims we assert against perceived infringers could provoke these parties to assert counterclaims against us alleging that we infringe their intellectual property or that our patent and other intellectual property rights are invalid or unenforceable, including for anti-trust reasons. As a result, in a patent infringement proceeding, a court or administrative body may decide that a patent of ours is invalid or unenforceable, in whole or in part, or may construe the patent's claims narrowly and so refuse to stop the other party from using the technology at issue on the grounds that our patents do not cover the competitor technology in question. Even if we are successful in a patent infringement action, the unsuccessful party may subsequently raise antitrust issues and bring a follow-on action thereon. Antitrust issues may also provide a bar to settlement or constrain the permissible settlement terms. Further, settlement agreements in the pharmaceutical sector are the subject of ongoing review by the antitrust authorities in the European Union.

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## [Table of Contents](#)

***Third parties may initiate legal proceedings alleging that we are infringing their intellectual property rights, the outcome of which would be uncertain and could have a material adverse effect on the success of our business.***

Our commercial success depends upon our ability and the ability of our collaborators to develop, manufacture, market and sell our product candidates and use our proprietary technologies without infringing the intellectual property and other proprietary rights of third parties. There is considerable intellectual property litigation in the biotechnology and pharmaceutical industries, and we may become party to, or threatened with, future adversarial proceedings or litigation regarding intellectual property rights with respect to our products and technology, including interference, derivation, inter partes review, reexamination, reissue or post-grant review proceedings before the USPTO. The risks of being involved in such litigation and office proceedings may also increase as our product candidates approach commercialization, and as we gain greater visibility as a publicly traded company in the United States. Third parties may assert infringement claims against us based on existing or future intellectual property rights and so restrict our freedom to operate. Third parties may also seek injunctive relief against us, whereby they would attempt to prevent us from practicing our technologies altogether pending outcome of any litigation against us. We may not be aware of all such intellectual property rights potentially relating to our product candidates prior to their assertion against us. For example, we have not conducted an in-depth freedom-to-operate search or analysis for ezutromid or ridinilazole. Any freedom-to-operate search or analysis previously conducted may not have uncovered all relevant patents and pending patent applications, and there may be pending or future patent applications that, if issued, would block us from commercializing ezutromid or ridinilazole. Thus, we do not know with certainty whether ezutromid, ridinilazole or any other product candidate or our commercialization thereof, does not and will not infringe any third party's intellectual property.

If we are found to infringe a third party's intellectual property rights, or in order to avoid or settle litigation, we could be required to obtain a license to enable us to continue developing and marketing our products and technology. However, we may not be able to obtain any required license on commercially reasonable terms or at all. Even if we were able to obtain a license, it could be non-exclusive, thereby giving our competitors access to the same technologies as are licensed to us, and could require us to make substantial payments. Absent a license, we could be forced, including by court order, to cease commercializing the infringing technology or product. In addition, we could be found liable for monetary damages, including treble damages and attorneys' fees if we are found to have willfully infringed a patent or other intellectual property right. A finding of infringement could prevent us from commercializing our product candidates or force us to cease some of our business operations, which could materially harm our business. Claims that we have misappropriated the confidential information or trade secrets of third parties, or claims that we derived our inventions from another, could have a similar negative impact on our business.

***We may be subject to claims by third parties asserting that we or our employees have misappropriated their intellectual property, or claiming ownership of what we regard as our own intellectual property.***

Many of our employees were previously employed at universities or other biotechnology or pharmaceutical companies, including our competitors or potential competitors. Although we try to ensure that our employees do not use the proprietary or otherwise confidential information or know-how of others in their work for us, we may be subject to claims that we or these employees have without authorization used or disclosed intellectual property, including trade secrets or other proprietary or confidential information, of any such employee's former employer. Litigation may be necessary to defend against these claims.

In addition, while we typically require our employees and contractors who may be involved in the development of intellectual property to execute agreements assigning such intellectual property to us and agreeing to cooperate and assist us with securing and defending our intellectual property, we may be unsuccessful in executing such an agreement with each party who in fact develops intellectual property that we regard as our own. Our and their assignment agreements may not be self-executing or may be breached, and we may be forced to bring claims against third parties, or defend claims they may bring against us, to determine the ownership of what we regard as our intellectual property.

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[Table of Contents](#)

If we fail in prosecuting or defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel. Even if we are successful in prosecuting or defending against such claims, litigation could result in substantial costs and be a distraction to management.

***Intellectual property litigation could cause us to spend substantial resources and could distract our personnel from their normal responsibilities.***

Even if resolved in our favor, litigation or other legal proceedings relating to intellectual property claims may cause us to incur significant expenses, and could distract our technical and management personnel from their normal responsibilities. In addition, there could be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our ADSs and ordinary shares. Such litigation or proceedings could substantially increase our operating losses and reduce the resources available for development, sales, marketing or distribution activities. We may not have sufficient financial or other resources to adequately conduct such litigation or proceedings. Some of our competitors may be able to sustain the costs of such litigation or proceedings more effectively than we can because of their greater financial resources. Accordingly, costs and lost management time, as well as uncertainties resulting from the initiation and continuation of patent litigation or other proceedings, could have a material adverse effect on our ability to compete in the marketplace.

***If we are unable to protect the confidentiality of our trade secrets, our business and competitive position would be harmed.***

In addition to seeking patents for some of our technology and products, we also rely on trade secrets, including unpatented know-how, technology and other proprietary and confidential information, to maintain our competitive position. We seek to protect these trade secrets, in part, by entering into non-disclosure and confidentiality agreements with parties who have access to them, such as our employees, corporate collaborators, outside scientific collaborators, contract manufacturers, consultants, advisors and other third parties. However, we cannot guarantee that we have executed these agreements with each party that may have or have had access to our trade secrets or that the agreements we have executed will provide adequate protection. Any party with whom we have executed such an agreement may breach that agreement and disclose our proprietary or confidential information, including our trade secrets, and we may not be able to obtain adequate remedies for such breaches. Enforcing a claim that a party illegally disclosed or misappropriated a trade secret is difficult, expensive and time-consuming, and the outcome is unpredictable. In addition, some courts inside and outside the United States are less willing or unwilling to protect trade secrets. If any of our trade secrets were to be lawfully obtained or independently developed by a competitor, we would have no right to prevent them, or those to whom they communicate it, from using that technology or information to compete with us. If any of our trade secrets, particularly unpatented know-how, were to be obtained or independently developed by a competitor, our competitive position would be harmed.

**Risks Related to Regulatory Approval and Marketing of our Product Candidates**

***Even if we complete the necessary clinical trials, the marketing approval process is expensive, time-consuming and uncertain and may prevent us from obtaining approvals for the commercialization of some or all of our product candidates. If we are not able to obtain, or if there are delays in obtaining, required regulatory approvals, we will not be able to commercialize our product candidates, and our ability to generate revenue will be materially impaired.***

Our product candidates, including ezutromid and ridinilazole, and the activities associated with their development and commercialization, including their design, testing, manufacture, safety, efficacy, recordkeeping, labeling, storage, approval, advertising, promotion, sale and distribution, are subject to comprehensive regulation by the FDA and by comparable authorities in other countries. Failure to obtain marketing approval for a product candidate will prevent us from commercializing the product candidate. We have not received approval to market ezutromid, ridinilazole or any of our other future product candidates from regulatory authorities in any jurisdiction.

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## [Table of Contents](#)

We have only limited experience in filing and supporting the applications necessary to obtain marketing approvals for product candidates and expect to rely on third-party contract research organizations to assist us in this process. Securing marketing approval requires the submission of extensive preclinical and clinical data and supporting information to regulatory authorities for each therapeutic indication to establish the product candidate's safety and efficacy. Securing marketing approval also requires the submission of information about the product manufacturing process to, and inspection of manufacturing facilities by, the regulatory authorities. Regulatory authorities may determine that ezutromid, ridinilazole or any of our other future product candidates are not effective or only moderately effective, or have undesirable or unintended side effects, toxicities, safety profiles or other characteristics that preclude us from obtaining marketing approval or that prevent or limit commercial use.

The process of obtaining marketing approvals is expensive, may take many years, if approval is obtained at all, and can vary substantially based upon a variety of factors, including the type, complexity and novelty of the product candidates involved. Changes in marketing approval policies during the development period, changes in or the enactment of additional statutes or regulations, or changes in regulatory review for each submitted product application, may cause delays in the approval or rejection of an application. Regulatory authorities have substantial discretion in the approval process and may refuse to accept any application or may decide that our data are insufficient for approval and require additional preclinical, clinical or other studies. In addition, varying interpretations of the data obtained from preclinical and clinical testing could delay, limit or prevent marketing approval of a product candidate. Any marketing approval we ultimately obtain may be limited or subject to restrictions or post-approval commitments that render the approved product not commercially viable. If we experience delays in obtaining approval or if we fail to obtain approval of our product candidates, the commercial prospects for our product candidates may be harmed and our ability to generate revenues will be materially impaired.

***Our failure to obtain marketing approval in jurisdictions other than the United States and Europe would prevent our product candidates from being marketed in these other jurisdictions, and any approval we are granted for our product candidates in the United States and Europe would not assure approval of product candidates in other jurisdictions.***

In order to market and sell ezutromid, ridinilazole and our other future product candidates in jurisdictions other than the United States and Europe, we must obtain separate marketing approvals and comply with numerous and varying regulatory requirements. The approval procedure varies among countries and can involve additional testing. The time required to obtain approval may differ from that required to obtain FDA or EMA approval. The regulatory approval process outside the United States and Europe generally includes all of the risks associated with obtaining FDA and EMA approval. In addition, some countries outside the United States and Europe require approval of the sales price of a drug before it can be marketed. In many countries, separate procedures must be followed to obtain reimbursement. We may not obtain marketing, pricing or reimbursement approvals outside the United States and Europe on a timely basis, if at all. Approval by the FDA or the EMA does not ensure approval by regulatory authorities in other countries or jurisdictions, and approval by one regulatory authority outside the United States and Europe does not ensure approval by regulatory authorities in other countries or jurisdictions or by the FDA or the EMA. We may not be able to file for marketing approvals and may not receive necessary approvals to commercialize our products in any market. Marketing approvals in countries outside the United States and Europe do not ensure pricing approvals in those countries or in any other countries, and marketing approvals and pricing approvals do not ensure that reimbursement will be obtained.

***Our ability to obtain and maintain conditional marketing authorizations in the European Union is limited to specific circumstances and subject to several conditions and obligations. A failure to renew any conditional approval that we obtain prior to full approval for the applicable indication would prevent us from continuing to market our products.***

Conditional marketing authorizations based on incomplete clinical data may be granted for a limited number of listed medicinal products for human use, including products designated as orphan medicinal products under

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## [Table of Contents](#)

E.U. law, if (1) the risk-benefit balance of the product is positive, (2) it is likely that the applicant will be in a position to provide the required comprehensive clinical trial data, (3) unmet medical needs will be fulfilled and (4) the benefit to public health of the immediate availability on the market of the medicinal product outweighs the risk inherent in the fact that additional data are still required. Specific obligations, including with respect to the completion of ongoing or new studies, and with respect to the collection of pharmacovigilance data, may be specified in the conditional marketing authorization. Conditional marketing authorizations are valid for one year and may be renewed annually, if the risk-benefit balance remains positive, and after an assessment of the need for additional or modified conditions. Even if we obtain conditional approval for ezutromid for the treatment of DMD or ridinilazole for the treatment of CDI, we may not be able to renew such conditional approval.

***Even if we obtain marketing approvals for our product candidates, the terms of approvals and ongoing regulation of our products may limit how we manufacture and market our products and compliance with such requirements may involve substantial resources, which could materially impair our ability to generate revenue.***

Even if marketing approval of a product candidate is granted, an approved product and its manufacturer and marketer are subject to ongoing review and extensive regulation, including the requirement to implement a risk evaluation and mitigation strategy or to conduct costly post-marketing studies or clinical trials and surveillance to monitor the safety or efficacy of the product. We must also comply with requirements concerning advertising and promotion for any of our product candidates for which we obtain marketing approval. Promotional communications with respect to prescription drugs are subject to a variety of legal and regulatory restrictions and must be consistent with the information in the product's approved labeling. Thus, we will not be able to promote any products we develop for indications or uses for which they are not approved. In addition, manufacturers of approved products and those manufacturers' facilities are required to ensure that quality control and manufacturing procedures conform to cGMP, which include requirements relating to quality control and quality assurance as well as the corresponding maintenance of records and documentation and reporting requirements. We and our contract manufacturers could be subject to periodic unannounced inspections by the FDA to monitor and ensure compliance with cGMP.

Accordingly, assuming we receive marketing approval for one or more of our product candidates, we and our contract manufacturers will continue to expend time, money and effort in all areas of regulatory compliance, including manufacturing, production, product surveillance and quality control. If we are not able to comply with post-approval regulatory requirements, we could have the marketing approvals for our products withdrawn by regulatory authorities and our ability to market any future products could be limited, which could adversely affect our ability to achieve or sustain profitability. Thus, the cost of compliance with post-approval regulations may have a negative effect on our operating results and financial condition.

***Any product candidate for which we obtain marketing approval will be subject to strict enforcement of post-marketing requirements and we could be subject to substantial penalties, including withdrawal of our product from the market, if we fail to comply with all regulatory requirements or if we experience unanticipated problems with our products, when and if any of them are approved.***

Any product candidate for which we obtain marketing approval, along with the manufacturing processes, post-approval clinical data, labeling, advertising and promotional activities for such product, will be subject to continual requirements of and review by the FDA and other regulatory authorities. These requirements include, but are not limited to, restrictions governing promotion of an approved product, submissions of safety and other post-marketing information and reports, registration and listing requirements, cGMP requirements relating to manufacturing, quality control, quality assurance and corresponding maintenance of records and documents, and requirements regarding the distribution of samples to physicians and recordkeeping.

The FDA and other federal and state agencies, including the Department of Justice, closely regulate compliance with all requirements governing prescription drug products, including requirements pertaining to

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## [Table of Contents](#)

marketing and promotion of drugs in accordance with the provisions of the approved labeling and manufacturing of products in accordance with cGMP requirements. The FDA and DOJ impose stringent restrictions on manufacturers' communications regarding off-label use and if we do not market our products for their approved indications, we may be subject to enforcement action for off-label marketing. Violations of such requirements may lead to investigations alleging violations of the Food, Drug and Cosmetic Act and other statutes, including the False Claims Act and other federal and state health care fraud and abuse laws as well as state consumer protection laws. Our failure to comply with all regulatory requirements, and later discovery of previously unknown adverse events or other problems with our products, manufacturers or manufacturing processes, may yield various results, including:

- litigation involving patients taking our products;
- restrictions on such products, manufacturers or manufacturing processes;
- restrictions on the labeling or marketing of a product;
- restrictions on product distribution or use;
- requirements to conduct post-marketing studies or clinical trials;
- warning or untitled letters;
- withdrawal of the products from the market;
- refusal to approve pending applications or supplements to approved applications that we submit;
- recall of products;
- fines, restitution or disgorgement of profits or revenues;
- suspension or withdrawal of marketing approvals;
- damage to relationships with any potential collaborators;
- unfavorable press coverage and damage to our reputation;
- refusal to permit the import or export of our products;
- product seizure; or
- injunctions or the imposition of civil or criminal penalties.

Non-compliance by us or any future collaborator with regulatory requirements regarding safety monitoring or pharmacovigilance, and with requirements related to the development of products for the pediatric population, can also result in significant financial penalties. Similarly, failure to comply with regulatory requirements regarding the protection of personal information can also lead to significant penalties and sanctions.

Non-compliance with E.U. requirements regarding safety monitoring or pharmacovigilance, and with requirements related to the development of products for the pediatric population, can also result in significant financial penalties. Similarly, failure to comply with the European Union's requirements regarding the protection of personal information can also lead to significant penalties and sanctions.

### ***Fast track designation by the FDA may not actually lead to a faster development or regulatory review or approval process.***

If a drug is intended for the treatment of a serious or life threatening condition and the drug demonstrates the potential to address unmet medical need for this condition, the drug sponsor may apply for FDA fast track designation. The FDA has granted fast track designation for ridinilazole. However, a fast track designation does not ensure that ridinilazole will receive marketing approval or that approval will be granted within any particular timeframe. We may also seek fast track designation for ezutromid or other future product candidates. Even if the

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## [Table of Contents](#)

FDA grants fast track designation, we may not experience a faster development process, review or approval compared to conventional FDA procedures. In addition, the FDA may withdraw fast track designation if it believes that the designation is no longer supported by data from our clinical development program. Fast track designation alone does not guarantee qualification for the FDA's priority review procedures.

***Priority review designation by the FDA may not lead to a faster regulatory review or approval process and, in any event, does not assure FDA approval of our product candidates.***

If the FDA determines that a product candidate offers major advances in treatment or provides a treatment where no adequate therapy exists, the FDA may designate the product candidate for priority review. A priority review designation means that the goal for the FDA to review an application is six months, rather than the standard review period of ten months. Because the FDA designated ridinilazole as a qualified infectious disease product, or QIDP, ridinilazole also will receive priority review. We may also request priority review for ezutromid or other future product candidates. The FDA has broad discretion with respect to whether or not to grant priority review status to a product candidate, so even if we believe a particular product candidate is eligible for such designation or status, the FDA may decide not to grant it. Moreover, a priority review designation does not necessarily mean a faster regulatory review process or necessarily confer any advantage with respect to approval compared to conventional FDA procedures. Receiving priority review from the FDA does not guarantee approval within the six-month review cycle or thereafter.

***We may not be able to obtain orphan drug exclusivity for our product candidates. If our competitors are able to obtain orphan drug exclusivity for their products that are the same drug as our product candidates, or can be classified as a similar medicinal product within the meaning of E.U. law, we may not be able to have competing products approved by the applicable regulatory authority for a significant period of time.***

Regulatory authorities in some jurisdictions, including Europe and the United States, may designate drugs for relatively small patient populations as orphan drugs. The FDA has granted orphan drug designation to ezutromid for the treatment of DMD, and the EMA has designated ezutromid as an orphan medicinal product. Generally, if a product with an orphan drug designation receives the first marketing approval for the indication for which it has such designation, the product is entitled to a period of market exclusivity, which, subject to certain exceptions, precludes the EMA from accepting another marketing application for a similar medicinal product or the FDA from approving another marketing application for the same drug for the same indication for that time period. The applicable market exclusivity period is seven years in the United States and ten years in the European Union. The E.U. exclusivity period can be reduced to six years if a drug no longer meets the criteria for orphan drug designation, including if the drug is sufficiently profitable so that market exclusivity is no longer justified.

In the European Union, a "similar medicinal product" is a medicinal product containing a similar active substance or substances as contained in a currently authorized orphan medicinal product, and which is intended for the same therapeutic indication. For a drug such as ezutromid, the FDA defines "same drug" as a drug that contains the same active moiety and is intended for the same use. Obtaining orphan drug exclusivity for ezutromid for DMD, both in the United States and in Europe, may be important to the product candidate's success. If a competitor obtains orphan drug exclusivity for and approval of a product with the same indication as ezutromid before we do and if the competitor's product is the same drug or a similar medicinal product as ours, we could be excluded from the market.

Moreover, even if we obtain orphan drug exclusivity for ezutromid for DMD, we may not be able to maintain it. For example, if a competitive product that is the same drug or a similar medicinal product as our product candidate is shown to be clinically superior to our product candidate, any orphan drug exclusivity we have obtained will not block the approval of such competitive product. In addition, orphan drug exclusivity will not prevent the approval of a product that is the same drug as our product candidate if the FDA finds that we cannot assure the availability of sufficient quantities of the drug to meet the needs of the persons with the disease



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## [Table of Contents](#)

or condition for which the drug was designated. Finally, even if we obtain orphan drug exclusivity for a product, that exclusivity may not effectively protect the product from competition because different products can be approved for the same condition.

***Our relationships with customers, healthcare providers and professionals and third-party payors will be subject to applicable anti-kickback, fraud and abuse and other healthcare laws and regulations, which could expose us to criminal sanctions, civil penalties, contractual damages, reputational harm and diminished profits and future earnings.***

Healthcare providers, physicians and third-party payors play a primary role in the recommendation and prescription of any product candidates, including ezutromid or ridinilazole, for which we obtain marketing approval. Our future arrangements with customers, healthcare providers and professionals and third-party payors may expose us to broadly applicable fraud and abuse and other healthcare laws and regulations that may constrain the business or financial arrangements and relationships through which we market, sell and distribute our products for which we obtain marketing approval. Restrictions under applicable federal and state healthcare laws and regulations, include, and are not limited to, the following:

- The federal healthcare anti-kickback statute prohibits, among other things, persons from knowingly and willfully soliciting, offering, receiving or providing remuneration, directly or indirectly, in cash or in kind, to induce or reward either the referral of an individual for, or the purchase, order or recommendation of, any good or service, for which payment may be made under federally funded healthcare programs such as Medicare and Medicaid. This statute has been broadly interpreted to apply to manufacturer arrangements with prescribers, purchasers and formulary managers, among others. Several other countries, including the United Kingdom, have enacted similar anti-kickback, fraud and abuse, and healthcare laws and regulations.
- The federal False Claims Act imposes civil penalties, including civil whistleblower or *qui tam* actions, against individuals or entities for knowingly presenting, or causing to be presented, to the federal government, claims for payment that are false or fraudulent or making a false statement to avoid, decrease or conceal an obligation to pay money to the federal government. The government and *qui tam* relators have brought False Claims Act actions against pharmaceutical companies on the theory that their practices have caused false claims to be submitted to the government. There is also a separate false claims provision imposing criminal penalties.
- The federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, imposes criminal and civil liability for executing a scheme to defraud any healthcare benefit program and also imposes obligations, including mandatory contractual terms, with respect to safeguarding the privacy, security and transmission of individually identifiable health information.
- HIPAA also imposes criminal liability for knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false statement in connection with the delivery of or payment for healthcare benefits, items or services.
- The federal Physician Sunshine Act requirements under the Patient Protection and Affordable Care Act of 2010, as amended by the Health Care and Education Reconciliation Act of 2010, referred to together as the Affordable Care Act, require manufacturers of drugs, devices, biologics and medical supplies to report to the Department of Health and Human Services information related to payments and other transfers of value made to or at the request of covered recipients, such as physicians and teaching hospitals, and physician ownership and investment interests in such manufacturers. Payments made to physicians and research institutions for clinical trials are included within the ambit of this law.
- Analogous state laws and regulations, such as state anti-kickback and false claims laws, may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental third-party payors, including private insurers, and some state laws require

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## [Table of Contents](#)

pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government in addition to requiring drug manufacturers to report information related to payments to physicians and other health care providers or marketing expenditures.

Efforts to ensure that our business arrangements with third parties will comply with applicable healthcare laws and regulations will involve substantial costs. It is possible that governmental authorities will conclude that our business practices may not comply with current or future statutes, regulations or case law involving applicable fraud and abuse or other healthcare laws and regulations. If our operations are found to be in violation of any of these laws or any other governmental regulations that may apply to us, we may be subject to significant civil, criminal and administrative penalties, damages, fines, exclusion from government funded healthcare programs, such as Medicare and Medicaid, and the curtailment or restructuring of our operations. Exclusion, suspension and debarment from government funded healthcare programs would significantly impact our ability to commercialize, sell or distribute any drug. If any of the physicians or other providers or entities with whom we expect to do business are found to be not in compliance with applicable laws, they may be subject to criminal, civil or administrative sanctions, including exclusions from government funded healthcare programs.

### ***Recently enacted and future legislation may increase the difficulty and cost for us to obtain marketing approval of and commercialize our product candidates and affect the prices we may obtain.***

In the United States and some foreign jurisdictions, there have been a number of legislative and regulatory changes and proposed changes regarding the healthcare system that could prevent or delay marketing approval of ezutromid, ridinilazole or any of our other future product candidates, restrict or regulate post-approval activities and affect our ability to profitably sell any product candidates, including ezutromid or ridinilazole, for which we obtain marketing approval.

In the United States, the Medicare Prescription Drug, Improvement, and Modernization Act of 2003, or Medicare Modernization Act, changed the way Medicare covers and pays for pharmaceutical products. The legislation expanded Medicare coverage for drug purchases by the elderly and introduced a new reimbursement methodology based on average sales prices for physician administered drugs. In addition, this legislation provided authority for limiting the number of drugs that will be covered in any therapeutic class. Cost reduction initiatives and other provisions of this legislation could decrease the coverage and price that we receive for any approved products. While the Medicare Modernization Act applies only to drug benefits for Medicare beneficiaries, private payors often follow Medicare coverage policy and payment limitations in setting their own reimbursement rates. Therefore, any reduction in reimbursement that results from the Medicare Modernization Act may result in a similar reduction in payments from private payors.

In March 2010, President Obama signed into law the Affordable Care Act, a sweeping law intended to broaden access to health insurance, reduce or constrain the growth of healthcare spending, enhance remedies against fraud and abuse, add new transparency requirements for health care and health insurance industries, impose new taxes and fees on the health industry and impose additional health policy reforms. Effective October 1, 2010, the Affordable Care Act revised the definition of "average manufacturer price" for reporting purposes, which could increase the amount of Medicaid drug rebates to states. Further, the new law imposes a significant annual fee on companies that manufacture or import branded prescription drug products.

There have been multiple attempts through legislative action and legal challenge to repeal or amend the Affordable Care Act. Although the U.S. Supreme Court in *King v. Burwell* upheld the use of subsidies to individuals in federally facilitated health care exchanges on June 25, 2015, which ultimately did not disrupt significantly the implementation of the Affordable Care Act, we cannot predict whether other current or future efforts to repeal or amend these laws will be successful, nor can we predict the impact that such a repeal or amendment would have on our business and operations, or on our results of operations. In addition, there are numerous steps required to implement the Affordable Care Act, and implementation remains ongoing. Congress

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## [Table of Contents](#)

also has enacted, and may continue to seek, legislative changes that alter, delay, or eliminate some of its provisions. On February 1, 2016, the Centers for Medicare and Medicaid Services released a long-awaited new rule, the Medicaid Program Covered Outpatient Drug Final Rule, effective April 1, 2016, implementing various provisions related to “covered outpatient drugs,” including revising the calculation of “average manufacturer price” and addressing other issues relating to Medicaid price reporting and reimbursement. These and other changes contribute to the uncertainty of the ongoing implementation and impact of the Affordable Care Act; they also underscore the potential for additional reform going forward. Certain provisions of enacted or proposed legislative changes may negatively impact coverage and reimbursement of healthcare items and services. We cannot assure that the Affordable Care Act, as currently enacted or as amended in the future, will not adversely affect our business and financial results and we cannot predict how future federal or state legislative or administrative changes relating to healthcare reform will affect our business.

Legislative and regulatory proposals have been made to expand post-approval requirements and restrict sales and promotional activities for pharmaceutical products. We cannot be sure whether additional legislative changes will be enacted, or whether FDA regulations, guidance or interpretations will be changed, or what the impact of such changes on the marketing approvals of our product candidates, if any, may be. In addition, increased scrutiny by the U.S. Congress of the FDA’s approval process may significantly delay or prevent marketing approval, as well as subject us to more stringent product labeling and post-marketing testing and other requirements.

In the European Union, similar political, economic and regulatory developments may affect our ability to profitably commercialize our products. In addition to continuing pressure on prices and cost containment measures, legislative developments at the European Union or member state level may result in significant additional requirements or obstacles that may increase our operating costs.

***We are subject to anti-corruption laws, as well as export control laws, customs laws, sanctions laws and other laws governing our operations. If we fail to comply with these laws, we could be subject to civil or criminal penalties, other remedial measures and legal expenses, which could adversely affect our business, results of operations and financial condition.***

Our operations are subject to anti-corruption laws, including the U.K. Bribery Act 2010, or Bribery Act, the U.S. Foreign Corrupt Practices Act, or FCPA, and other anti-corruption laws that apply in countries where we do business and may do business in the future. The Bribery Act, FCPA and these other laws generally prohibit us, our officers, and our employees and intermediaries from bribing, being bribed or making other prohibited payments to government officials or other persons to obtain or retain business or gain some other business advantage. We may in the future operate in jurisdictions that pose a high risk of potential Bribery Act or FCPA violations, and we may participate in collaborations and relationships with third parties whose actions could potentially subject us to liability under the Bribery Act, FCPA or local anti-corruption laws. In addition, we cannot predict the nature, scope or effect of future regulatory requirements to which our international operations might be subject or the manner in which existing laws might be administered or interpreted.

We are also subject to other laws and regulations governing our international operations, including regulations administered by the governments of the United Kingdom and the United States, and authorities in the European Union, including applicable export control regulations, economic sanctions on countries and persons, customs requirements and currency exchange regulations, collectively referred to as the Trade Control laws.

There is no assurance that we will be completely effective in ensuring our compliance with all applicable anti-corruption laws, including the Bribery Act, the FCPA or other legal requirements, including Trade Control laws. If we are not in compliance with the Bribery Act, the FCPA and other anti-corruption laws or Trade Control laws, we may be subject to criminal and civil penalties, disgorgement and other sanctions and remedial measures, and legal expenses, which could have an adverse impact on our business, financial condition, results of operations and liquidity. Likewise, any investigation of any potential violations of the Bribery Act, the FCPA, other anti-corruption laws or Trade Control laws by U.K., U.S. or other authorities could also have an adverse impact on our reputation, our business, results of operations and financial condition.

## **Risks Related to Employee Matters and Managing Growth**

### ***Our future success depends on our ability to retain our chief executive officer and other key executives and to attract, retain and motivate qualified personnel.***

We are highly dependent on the principal members of our executive and scientific teams, including Glyn Edwards, our Chief Executive Officer, Erik Ostrowski, our Chief Financial Officer, Dr. Ralf Roskamp, our Chief Medical Officer, Dr. Jonathon Tinsley, our Chief Scientific Officer, DMD, and Dr. Richard Vickers, our Chief Scientific Officer, Antimicrobials. Although we have formal employment agreements with each of our executive officers, these agreements do not prevent our executives from terminating their employment with us at any time. We do not maintain “key person” insurance on any of our executive officers. The unplanned loss of the services of any of these persons could materially impact the achievement of our research, development and commercialization objectives.

Recruiting and retaining qualified scientific, clinical, manufacturing and sales and marketing personnel, including in the United States where we plan to continue to expand our physical presence, will also be critical to our success. We may not be able to attract and retain these personnel on acceptable terms given the competition among numerous biotechnology and pharmaceutical companies for similar personnel. We also experience competition for the hiring of scientific and clinical personnel from universities and research institutions. In addition, we rely on consultants and advisors, including scientific and clinical advisors, to assist us in formulating our research and development and commercialization strategy. Our consultants and advisors may be employed by employers other than us and may have commitments under consulting or advisory contracts with other entities that may limit their availability to us.

### ***We expect to expand our development, regulatory and sales and marketing capabilities, and as a result, we may encounter difficulties in managing our growth, which could disrupt our operations.***

We expect to experience significant growth in the number of our employees and the scope of our operations, particularly in the areas of drug development, regulatory affairs and sales and marketing. To manage our anticipated future growth, we must continue to implement and improve our managerial, operational and financial systems, expand our facilities and continue to recruit and train additional qualified personnel. Due to our limited financial resources and the limited experience of our management team in managing a company with such anticipated growth, we may not be able to effectively manage the expansion of our operations or recruit and train additional qualified personnel. The physical expansion of our operations may lead to significant costs and may divert our management and business development resources. Any inability to manage growth could delay the execution of our business plans or disrupt our operations.

### ***Our employees may engage in misconduct or other improper activities, including non-compliance with regulatory standards and requirements, which could cause significant liability for us and harm our reputation.***

We are exposed to the risk of employee fraud or other misconduct, including intentional failures to comply with FDA or Office of Inspector General regulations or similar regulations of comparable non-U.S. regulatory authorities, provide accurate information to the FDA or comparable non-U.S. regulatory authorities, comply with manufacturing standards we have established, comply with federal and state healthcare fraud and abuse laws and regulations and similar laws and regulations established and enforced by comparable non-U.S. regulatory authorities, report financial information or data accurately or disclose unauthorized activities to us. Employee misconduct could also involve the improper use of information obtained in the course of clinical trials, which could result in regulatory sanctions and serious harm to our reputation. It is not always possible to identify and deter employee misconduct, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to be in compliance with such laws, standards or regulations. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business and results of operations, including the imposition of significant fines or other sanctions.

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[Table of Contents](#)

**Risks Related to Ownership of our American Depositary Shares and Ordinary Shares**

*The prices of our ADSs and ordinary shares may be volatile and fluctuate substantially, which could result in substantial losses for holders of our ADSs and ordinary shares.*

The market prices of our ADSs on the NASDAQ Global Market and of our ordinary shares on AIM may be volatile and fluctuate substantially. The stock market in general and the market for smaller pharmaceutical and biotechnology companies in particular have experienced extreme volatility that has often been unrelated to the operating performance of particular companies. As a result of this volatility, holders of our ADSs and ordinary shares may not be able to sell their ADSs or ordinary shares at or above the price at which they were purchased. The market price for the ADSs and ordinary shares may be influenced by many factors, including:

- the success of competitive products or technologies;
- results of clinical trials of ezutromid, ridinilazole and any other future product candidate that we develop;
- results of clinical trials of product candidates of our competitors;
- changes or developments in laws or regulations applicable to ezutromid and ridinilazole and any other future product candidates that we develop;
- developments or disputes concerning patent applications, issued patents or other proprietary rights;
- the recruitment or departure of key personnel;
- the level of expenses related to any of our product candidates or clinical development programs;
- actual or anticipated changes in estimates as to financial results, development timelines or recommendations by securities analysts;
- variations in our financial results or those of companies that are perceived to be similar to us;
- changes in the structure of healthcare payment systems;
- market conditions in the biotechnology and pharmaceutical sectors;
- general economic, industry and market conditions;
- the trading volume of ADSs on the NASDAQ Global Market and of our ordinary shares on AIM; and
- the other factors described in this “Risk Factors” section.

*The dual listing of our ordinary shares and the ADSs may adversely affect the liquidity and value of the ADSs.*

Our ADSs are traded on the NASDAQ Global Market, and our ordinary shares are listed on AIM. The dual listing of our ordinary shares and the ADSs may dilute the liquidity of these securities in one or both markets and may adversely affect the maintenance of an active trading market for the ADSs in the United States. The price of the ADSs could also be adversely affected by trading in our ordinary shares on AIM. Although our ordinary shares are currently listed on AIM, we may decide at some point in the future to delist our ordinary shares from AIM, and our ordinary shareholders may approve such delisting. We cannot predict the effect such delisting of our ordinary shares on AIM would have on the market price of the ADSs on the NASDAQ Global Market.

*Securities traded on AIM may carry a higher risk than shares traded on other exchanges that may impact the value of your investment.*

Our ordinary shares are currently traded on AIM. Investment in equities traded on AIM is perceived by some to carry a higher risk than an investment in equities quoted on exchanges with more stringent listing requirements, such as the London Stock Exchange, New York Stock Exchange or the NASDAQ Stock Market. This is because AIM imposes less stringent corporate governance and ongoing reporting requirements than those

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## [Table of Contents](#)

other exchanges. In addition, AIM requires only semi-annual, rather than quarterly, financial reporting. You should be aware that the value of our ordinary shares may be influenced by many factors, some of which may be specific to us and some of which may affect AIM-listed companies generally, including the depth and liquidity of the market, our performance, a large or small volume of trading in our ordinary shares, legislative changes and general economic, political or regulatory conditions, and that the prices may be volatile and subject to extensive fluctuations. Therefore, the market price of our ordinary shares underlying the ADSs may not reflect the underlying value of our company.

***Substantial future sales of our ordinary shares or the ADSs in the public market, or the perception that these sales could occur, could cause the price of the ADSs to decline significantly, even if our business is doing well.***

Sales of a substantial number of our ordinary shares or ADSs in the public market could occur at any time. These sales, or the perception in the market that these sales could occur, could cause the market price of our ADSs and ordinary shares to decline. The ordinary shares held by our major shareholders are available for sale and are not subject to contractual and legal restrictions on resale. If any of our directors, officers or major shareholders seek to sell substantial amounts of our ADSs or ordinary shares, particularly if these sales are in a rapid or disorderly manner, or other investors perceive that these sales could occur, the market price of our ADSs and ordinary shares could decrease significantly.

***Holders of ADSs may not have the same voting rights as the holders of our ordinary shares and may not receive voting materials in time to be able to exercise their right to vote.***

Except as provided in the deposit agreement relating to the ADSs, holders of the ADSs will not be able to exercise voting rights attaching to the ordinary shares evidenced by the ADSs. Holders of the ADSs will have the right to instruct the depository with respect to the voting of the ordinary shares represented by the ADSs. If we tell the depository to solicit your voting instructions, the depository is required to endeavor to carry out your instructions. If we do not tell the depository to solicit your voting instructions (and we are not required to do so), you can still send instructions, and, in that case, the depository may, but is not required to, carry out those instructions. You may not receive voting materials in time to instruct the depository to vote, and it is possible that you, or persons who hold their ADSs through brokers, dealers or other third parties, will not have the opportunity to exercise a right to vote.

***As a foreign private issuer, we are exempt from a number of rules under the U.S. securities laws and are permitted to file less information with the Securities and Exchange Commission than U.S. companies. This may limit the information available to holders of the ADSs.***

We are a “foreign private issuer,” as defined in the rules and regulations of the Securities and Exchange Commission, or the SEC, and, consequently, we are not subject to all of the disclosure requirements applicable to companies organized within the United States. For example, we are exempt from certain rules under the U.S. Securities Exchange Act of 1934, as amended, or the Exchange Act, that regulate disclosure obligations and procedural requirements related to the solicitation of proxies, consents or authorizations applicable to a security registered under the Exchange Act. In addition, our officers and directors are exempt from the reporting and “short-swing” profit recovery provisions of Section 16 of the Exchange Act and related rules with respect to their purchases and sales of our securities. Moreover, we are not required to file periodic reports and financial statements with the SEC as frequently or as promptly as U.S. public companies. Accordingly, there may be less publicly available information concerning our company than there is for public companies organized in the United States.

As a foreign private issuer, we will continue to file an annual report on Form 20-F within four months of the close of each fiscal year ending January 31 and reports on Form 6-K relating to certain material events promptly after we publicly announce these events. However, because of the above exemptions for foreign private issuers, our shareholders will not be afforded the same protections or information generally available to investors holding shares in public companies organized in the United States.

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## [Table of Contents](#)

*As a foreign private issuer, we are not subject to certain NASDAQ corporate governance rules applicable to public companies organized in the United States.*

We rely on a provision in the NASDAQ Stock Market's Listed Company Manual that allows us to follow English company law in general and the U.K. Companies Act 2006 in particular with regard to certain aspects of corporate governance. This allows us to follow certain corporate governance practices that differ in significant respects from the corporate governance requirements applicable to U.S. companies listed on the NASDAQ Stock Market.

For example, we are exempt from regulations of the NASDAQ Stock Market that require listed companies organized in the United States to:

- have a majority of the board of directors consist of independent directors;
- require non-management directors to meet on a regular basis without management present;
- adopt a code of conduct and promptly disclose any waivers of the code for directors or executive officers that should address certain specified items;
- have an independent compensation committee;
- have an independent nominating committee;
- solicit proxies and provide proxy statements for all shareholder meetings;
- review related party transactions; and
- seek shareholder approval for the implementation of certain equity compensation plans and issuances of ordinary shares.

As a foreign private issuer, we are permitted to follow home country practice in lieu of the above requirements. Accordingly, our shareholders may not have the same protections afforded to shareholders of companies that are subject to these NASDAQ Stock Market requirements.

In accordance with our NASDAQ Stock Market listing, our Audit Committee is required to comply with the provisions of Section 301 of the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act, and Rule 10A-3 of the Exchange Act, both of which are also applicable to U.S. companies listed on the NASDAQ Stock Market. Because we are a foreign private issuer, however, our Audit Committee is not subject to additional requirements of the NASDAQ Stock Market applicable to listed U.S. companies, including an affirmative determination that all members of the Audit Committee are "independent," using more stringent criteria than those applicable to us as a foreign private issuer.

***We may lose our foreign private issuer status in the future, which could result in significant additional costs and expenses.***

As a "foreign private issuer" we are not required to comply with all the periodic disclosure and current reporting requirements of the Exchange Act and related rules and regulations. Under SEC rules, the determination of foreign private issuer status is made annually on the last business day of an issuer's most recently completed second fiscal quarter and, accordingly, the next determination will be made with respect to us on July 31, 2016.

In the future, we would lose our foreign private issuer status if a majority of our ordinary shares (including those represented by ADSs) are owned by U.S. shareholders and a majority of our shareholders, directors or management are U.S. citizens or residents and we fail to meet additional requirements necessary to avoid loss of foreign private issuer status. The regulatory and compliance costs to us under applicable U.S. securities laws as a U.S. domestic issuer may be significantly higher than our current regulatory and compliance costs. If we are not

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## [Table of Contents](#)

a foreign private issuer, we will be required to file periodic reports and registration statements on U.S. domestic issuer forms with the SEC, which are more detailed and extensive than the forms available to a foreign private issuer. For example, the annual report on Form 10-K requires domestic issuers to disclose executive compensation information on an individual basis with specific disclosure regarding the domestic compensation philosophy, objectives, annual total compensation (base salary, bonus, equity compensation) and potential payments in connection with change in control, retirement, death or disability, while the annual report on Form 20-F permits foreign private issuers to disclose compensation information on an aggregate basis. We will also have to report our results under U.S. Generally Accepted Accounting Principles, rather than under International Financial Reporting Standards, as a domestic registrant. We will also have to mandatorily comply with U.S. federal proxy requirements, and our officers, directors and principal shareholders will become subject to the short-swing profit disclosure and recovery provisions of Section 16 of the Exchange Act. We may also be required to modify certain of our policies to comply with corporate governance practices required for U.S. domestic issuers. Such conversion and modifications will involve additional costs. In addition, we may lose our ability to rely upon exemptions from certain corporate governance requirements of the NASDAQ Stock Market that are available to foreign private issuers.

***We are an “emerging growth company,” and the reduced disclosure requirements applicable to emerging growth companies may make the ADSs less attractive to investors.***

We are an “emerging growth company,” as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act, and may remain an emerging growth company until January 31, 2021 or such earlier time that we are no longer an emerging growth company. For so long as we remain an emerging growth company, we are permitted and intend to rely on exemptions from certain disclosure requirements that are applicable to other public companies that are not emerging growth companies. These exemptions include:

- not being required to comply with the auditor attestation requirements in the assessment of our internal control over financial reporting;
- not being required to comply with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the auditor’s report providing additional information about the audit and the financial statements;
- reduced disclosure obligations regarding executive compensation; and
- exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and shareholder approval of any golden parachute payments not previously approved.

We expect to continue to take advantage of some or all of the available exemptions. We cannot predict whether investors will find the ADSs less attractive if we rely on these exemptions. If some investors find the ADSs less attractive as a result, there may be a less active trading market for the ADSs and the market price of the ADSs may be more volatile.

In addition, the JOBS Act also provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. This allows an emerging growth company to delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have irrevocably elected not to avail ourselves of this exemption and, therefore, we will be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies.

***We incur increased costs as a result of operating as a company with ADSs that are publicly traded in the United States, and our management is now required to devote substantial time to new compliance initiatives.***

As a company with ADSs that are publicly traded in the United States, and particularly after we are no longer an “emerging growth company,” we have incurred and will continue to incur significant legal, accounting and other expenses that we did not previously incur. In addition, the Sarbanes-Oxley Act, the Dodd-Frank Act,



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## [Table of Contents](#)

the listing requirements of the NASDAQ Stock Market and other applicable securities rules and regulations impose various requirements on public companies, including establishment and maintenance of effective disclosure and financial controls and corporate governance practices. Our management and other personnel devote a substantial amount of time to these compliance initiatives. Moreover, these rules and regulations increase our legal and financial compliance costs and make some activities more time-consuming and costly.

However, for as long as we remain an emerging growth company, we may take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies as described in the preceding risk factor. We may remain an emerging growth company until January 31, 2021, although if the market value of our share capital held by non-affiliates exceeds \$700 million as of any July 31 before that time or if we have annual gross revenues of \$1 billion or more in any fiscal year, we would cease to be an emerging growth company as of January 31 of the applicable year. We also would cease to be an emerging growth company if we issue more than \$1 billion of non-convertible debt over a three-year period.

***If we fail to maintain an effective system of internal control over financial reporting, we may not be able to accurately report our financial results or prevent fraud. As a result, shareholders could lose confidence in our financial and other public reporting, which would harm our business and the trading price of the ADSs.***

Effective internal controls over financial reporting are necessary for us to provide reliable financial reports and, together with adequate disclosure controls and procedures, are designed to prevent fraud. Any failure to implement required new or improved controls, or difficulties encountered in their implementation could cause us to fail to meet our reporting obligations. In addition, any testing by us conducted in connection with Section 404 of the Sarbanes-Oxley Act, or Section 404, or any subsequent testing by our independent registered public accounting firm, as and when required, may reveal deficiencies in our internal controls over financial reporting that are deemed to be material weaknesses or that may require prospective or retroactive changes to our financial statements or identify other areas for further attention or improvement. Inferior internal controls could also cause investors to lose confidence in our reported financial information, which could have a negative effect on the trading price of the ADSs.

Pursuant to Section 404, we are required to furnish a report by our management on our internal control over financial reporting. However, as an emerging growth company, we will not be required to include an attestation report on internal control over financial reporting issued by our independent registered public accounting firm until we are no longer an emerging growth company. To achieve compliance with Section 404 within the prescribed period, we are engaged in a process to document and evaluate our internal control over financial reporting, which is both costly and challenging. In this regard, we will need to continue to dedicate internal resources, potentially engage outside consultants and adopt a detailed work plan to assess and document the adequacy of internal control over financial reporting, continue steps to improve control processes as appropriate, validate through testing that controls are functioning as documented and implement a continuous reporting and improvement process for internal control over financial reporting. Despite our efforts, there is a risk that we will not be able to conclude that our internal control over financial reporting is effective as required by Section 404. This could result in an adverse reaction in the financial markets due to a loss of confidence in the reliability of our financial statements.

***We cannot assure you that we will not be classified as a passive foreign investment company for any taxable year, which may result in adverse U.S. federal income tax consequence to U.S. holders.***

Based on our estimated gross income, the average value of our gross assets and the nature of our business, we do not believe that we were a “passive foreign investment company,” or PFIC, for U.S. federal income tax purposes for our tax year ended January 31, 2016 and do not expect to be a PFIC during our tax year ending January 31, 2017. A corporation organized outside the United States generally will be classified as a PFIC for U.S. federal income tax purposes in any taxable year in which at least 75% of its gross income is passive income or on average at least 50% of the gross value of its assets is attributable to assets that produce passive income or

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[Table of Contents](#)

are held for the production of passive income. Passive income for this purpose generally includes dividends, interest, royalties, rents and gains from commodities and securities transactions. Our status in any taxable year will depend on our assets and activities in each year, and because this is a factual determination made annually after the end of each taxable year, there can be no assurance that we will not be considered a PFIC for the current taxable year or any future taxable year. The market value of our assets may be determined in large part by reference to the market price of the ADSs and our ordinary shares, which fluctuates and which may fluctuate considerably given that market prices of biotechnology companies have been especially volatile. If we were to be treated as a PFIC for any taxable year during which a U.S. holder held the ADSs, however, certain adverse U.S. federal income tax consequences could apply to the U.S. holder. See “Item 10.E Taxation.”

***U.S. investors may have difficulty enforcing civil liabilities against our Company, our directors or members of senior management and the experts named in this Annual Report.***

Our directors and some of the experts named in this Annual Report are non-residents of the United States, and all or a substantial portion of the assets of such persons are located outside the United States. As a result, it may not be possible to serve process on such persons or us in the United States or to enforce judgments obtained in U.S. courts against them or us based on civil liability provisions of the securities laws of the United States. Further, there is doubt as to whether English courts would enforce certain civil liabilities under U.S. securities laws pursuant to judgments of U.S. courts based upon these civil liability provisions. In addition, awards of punitive damages in actions brought in the United States or elsewhere may be unenforceable in the United Kingdom. An award for monetary damages under the U.S. securities laws would be considered punitive if it does not seek to compensate the claimant for loss or damage suffered and is intended to punish the defendant. The enforceability of any judgment in the United Kingdom will depend on the particular facts of the case as well as the laws and treaties in effect at the time. The United States and the United Kingdom do not currently have a treaty providing for recognition and enforcement of judgments (other than arbitration awards) in civil and commercial matters.

***The rights of our shareholders may differ from the rights typically offered to shareholders of a U.S. corporation.***

We are incorporated under U.K. law. The rights of holders of ordinary shares and, therefore, certain of the rights of holders of ADSs, are governed by U.K. law, including the provisions of the Companies Act 2006, and by our Articles of Association. These rights differ in certain respects from the rights of shareholders in typical U.S. corporations.

***Holders of ordinary shares and ADSs may not receive a return on their ordinary shares or ADSs other than through the sale of their ordinary shares or ADSs.***

Under current U.K. law, a company’s accumulated realized profits must exceed its accumulated realized losses (on a non-consolidated basis) before dividends can be paid. Therefore, we must have distributable profits before issuing a dividend. We have not paid dividends in the past on our ordinary shares. We intend to retain earnings, if any, for use in our business and do not anticipate paying any cash dividends in the foreseeable future. Accordingly, other than through the sale of our shares, our shareholders are unlikely to receive a return in the foreseeable future.

***Holders of our ADSs may not receive distributions on our ordinary shares represented by the ADSs or any value for them if it is illegal or impractical to make them available to such holders.***

The depository for the ADSs has agreed to pay to holders of our ADSs or distribute the cash dividends or other distributions it or the custodian receives on our ordinary shares or other deposited securities after deducting its fees and expenses. Holders of our ADSs will receive these distributions in proportion to the number of our ordinary shares their ADSs represent. However, in accordance with the limitations set forth in the deposit agreement, it may be unlawful or impractical to make a distribution available to holders of our ADSs. We have

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## [Table of Contents](#)

no obligation to take any other action to permit the distribution of the ADSs, ordinary shares, rights or anything else to holders of the ADSs. This means that holders of our ADSs may not receive the distributions we make on our ordinary shares or any value from them if it is unlawful or impractical to make them available to such holders. These restrictions may have a material adverse effect on the value of our ADSs.

***Our executive officers, directors and principal shareholders maintain the ability to control or significantly influence all matters submitted to stockholders for approval.***

As of April 15, 2016, our executive officers, directors and principal shareholders beneficially owned, in the aggregate, ordinary shares and ADSs representing approximately 48.91% of our outstanding share capital. As a result, if these shareholders were to choose to act together, they would be able to control or significantly influence all matters submitted to our shareholders for approval, as well as our management and affairs. For example, these persons, if they choose to act together, would control or significantly influence the election of directors and approval of any merger, consolidation or sale of all or substantially all of our assets. This concentration of voting power could delay or prevent an acquisition of our company on terms that other holders of ADSs and ordinary shares may desire.

In addition, and in accordance with the terms of our articles of association, our board is also in the process of implementing a classified board structure such that not all members of the board are elected at one time. Because our board of directors is responsible for appointing the members of our management team, this structure may frustrate or prevent any attempts by our shareholders to replace or remove our current management by making it more difficult for shareholders to replace members of our board of directors.

***We are exposed to risks related to currency exchange rates.***

We conduct a significant portion of our operations outside of the United Kingdom. Because our financial statements are presented in pounds sterling, changes in currency exchange rates have had and could have a significant effect on our operating results when our operating results are translated into U.S. dollars. Exchange rate fluctuations between local currencies and the pound sterling create risk in several ways, including the following: weakening of the pound sterling may increase the pound sterling cost of overseas research and development expenses and the cost of sourced product components outside the United Kingdom; strengthening of the pound sterling may decrease the value of our revenues denominated in other currencies; the exchange rates on non-sterling transactions and cash deposits can distort our financial results; and commercial pricing and profit margins are affected by currency fluctuations.

***We have broad discretion in the use of our cash and cash equivalents and may not use them effectively.***

Our management has broad discretion in the use of our cash and cash equivalents and could spend our cash in ways that do not improve our results of operations or enhance the value of our ADSs and ordinary shares. The failure by our management to apply these funds effectively could result in financial losses that could have a material adverse effect on our business, cause the market price of the ADSs and ordinary shares to decline and delay the development of our product candidates.

## **Item 4: Information on the Company**

### **A. History and Development of the Company**

We were founded in 2003 and are a public limited company incorporated under the laws of England and Wales with the Registrar of Companies of England and Wales, United Kingdom. Our principal office is located at 85b Park Drive, Milton Park, Abingdon, Oxfordshire, OX14 4RY, and our telephone number is +(44) 1235 443 939. Our U.S. operations are conducted by our wholly-owned subsidiary Summit Therapeutics Inc., a Delaware corporation. Our ordinary shares have traded on AIM, which is a sub-market of the London Stock Exchange, since October, 2004, under the symbol "SUMM" and our American Depositary Shares have traded on the NASDAQ Global Market since March 2015, under the symbol "SMMT".

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## [Table of Contents](#)

Our website address is [www.summitplc.com](http://www.summitplc.com). The information contained on, or that can be accessed from, our website does not form part of this Annual Report. Our agent for service of process in the United States is C T Corporation System, 111 Eighth Avenue, New York, New York 10011.

In the three-year period ended January 31, 2016, we have invested a total of £0.1 million in equipment and facilities.

### **B. Business**

#### **Overview**

We are a biopharmaceutical company focused on the discovery, development and commercialization of novel medicines for indications for which there are no existing or only inadequate therapies. We are conducting clinical programs focused on the genetic disease Duchenne muscular dystrophy, or DMD, and the infectious disease *Clostridium difficile* infection, or CDI.

#### ***Duchenne Muscular Dystrophy***

Our lead DMD product candidate is ezutromid (formerly SMT C1100), an orally administered small molecule. We expect to commence enrollment and dosing of patients in a Phase 2 clinical trial of ezutromid in patients with DMD during the second quarter of 2016. This trial is designed to evaluate the potential benefits of longer-term dosing of ezutromid by measuring a number of endpoints related to muscle health and muscle function, along with monitoring the safety and tolerability of long-term exposure to ezutromid. We refer to this Phase 2 clinical trial as PhaseOut DMD, a Phase 2 proof of concept clinical trial. We expect to report data periodically during this trial with the first set of 24-week muscle biopsy data from the first group of patients enrolled expected to be reported in January 2017. Our DMD program is based on utrophin modulation, an approach to treating DMD that is independent of the underlying mutations in the dystrophin gene that cause the disease. We are a leader in the field of utrophin modulation, an approach that we believe has the potential to address the entire population of DMD patients. Other DMD approaches, such as exon-skipping and suppression of nonsense mutations, only address subsets of this population. The U.S. Food and Drug Administration, or the FDA, has granted orphan drug designation to ezutromid for the treatment of DMD, and the European Medicines Agency, or the EMA, has designated ezutromid as an orphan medicinal product.

DMD is one of the most common and the most severe form of muscular dystrophy. DMD predominantly affects males and results in the progressive wasting of muscles throughout the body. The disease typically results in death by the time DMD patients reach their late twenties. Individuals with DMD are unable to produce dystrophin, a protein essential for maintaining healthy muscle function.

Utrophin is a naturally occurring protein that is functionally and structurally similar to dystrophin. Utrophin plays an active role in the development of new muscle fibers, in particular during fetal development, and in repairing damaged muscle fibers. Utrophin production is down regulated, or switched off, in the late stages of gestation and can switch on and off as needed to repair damaged muscle. We believe that our approach of utrophin modulation can be used to maintain the production of utrophin in all skeletal muscles, including the diaphragm, and the heart to compensate for the lack of dystrophin in DMD patients, thereby restoring and maintaining healthy muscle function. This approach to treating DMD is independent of the underlying dystrophin gene mutation, and we believe has the potential to treat the entire population of DMD patients.

To date, we have conducted three Phase 1 clinical trials of ezutromid. We completed a Phase 1 clinical trial of ezutromid in healthy volunteers in 2012, a Phase 1b clinical trial of ezutromid in DMD patients in May 2014 and another Phase 1b clinical trial of ezutromid in DMD patients in September 2015. The second Phase 1b clinical trial of ezutromid in DMD patients that evaluated the impact of diet on plasma levels of the drug. We refer to this second Phase 1b as our Phase 1b modified diet trial. In all of our Phase 1 trials, ezutromid was well tolerated at all doses tested with no serious adverse events reported. We hold exclusive worldwide commercialization rights for ezutromid for all indications.

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## [Table of Contents](#)

In addition to the PhaseOut DMD clinical trial for ezutromid, we are also evaluating in a Phase 1 clinical trial a potential optimized formulation of ezutromid. We are also currently pursuing a broad utrophin modulator technology program to develop second and future generation utrophin modulator product candidates. This development is being undertaken as part of a strategic alliance with research groups at the University of Oxford.

### ***Clostridium difficile Infection***

Our lead CDI product candidate is ridinilazole (formerly SMT19969), an orally administered small molecule antibiotic. We reported positive top-line results from a Phase 2 clinical trial of ridinilazole in November 2015 and reported additional data in April 2016. Ridinilazole is designed to selectively target *Clostridium difficile* bacteria without causing collateral damage to the gut flora and thereby reduce CDI recurrence rates, which is the key clinical issue in this disease. The FDA has designated ridinilazole as a qualified infectious disease product, or QIDP, and the FDA granted ridinilazole fast track status in July 2015. In 2013, the Centers for Disease Control and Prevention of the U.S. Department of Health and Human Services, or CDC, highlighted CDI as one of three pathogens that pose an immediate public health threat and require urgent and aggressive action.



CDI is a bacterial infection of the colon that produces toxins causing inflammation of the colon and severe diarrhea. CDI can also result in more serious disease complications, including pseudomembranous colitis, bowel perforation, toxic megacolon and sepsis. CDI typically develops following the use of broad spectrum antibiotics that can cause widespread damage to the natural gut flora and allow overgrowth of *Clostridium difficile* bacteria. CDI represents a serious healthcare issue in hospitals, long-term care homes and, increasingly, in the wider community. A study published in 2012 in *Clinical Infectious Diseases*, a peer reviewed journal published by the Infectious Diseases Society of America, estimated that CDI-related acute care costs total \$4.8 billion per year in the United States alone.

We completed a Phase 1 clinical trial of ridinilazole in healthy volunteers in 2013. In this Phase 1 clinical trial, ridinilazole was highly selective for total *clostridia* bacteria with minimal impact on the other gut flora of subjects, which was consistent with the results of our preclinical studies of ridinilazole. In November 2015, we reported top-line results from our double blind, randomized, active controlled Phase 2 clinical trial that evaluated ridinilazole compared to the current standard of care, vancomycin, for the treatment of CDI. The Phase 2 clinical trial exceeded its primary endpoint of non-inferiority, with ridinilazole achieving statistical superiority over vancomycin in sustained clinical response, or SCR. The statistical superiority was driven by a large numerical reduction in recurrent disease compared with vancomycin. Preliminary analysis of the data from our Phase 2 clinical trial of ridinilazole also showed ridinilazole to be highly preserving of the gut microbiome compared to patients who received vancomycin, who experienced substantial damage to the gut microbiome which for many patients persisted during the 30-day post-treatment period. Ridinilazole was well tolerated at all doses tested in both the Phase 1 and Phase 2 clinical trials. We hold exclusive worldwide commercialization rights for ridinilazole for all indications.

[Table of Contents](#)

**Our Product Development Pipeline**

The following table summarizes our product development pipeline. We are also developing an earlier stage pipeline of second and future generation utrophin modulators for the treatment of DMD.

Program	Preclinical	Phase 1	Phase 2	Phase 3	Next expected milestone
<b><i>Clostridium difficile</i> Infection</b>					
Ridinilazole (formerly SMT19969)	 <i>Qualified Infectious Disease Product (FDA)</i> <i>Fast Track (FDA)</i>				Reporting further data from Phase 2 clinical trial
<b>Duchenne Muscular Dystrophy</b>					
Ezutromid (formerly SMT C1100)	 <i>Orphan Drug Designation (FDA)</i> <i>Orphan Medicinal Product (EMA)</i>				First set of 24-week muscle biopsy data from first group of patients enrolled in PhaseOut DMD trial expected to be reported in Jan. 2017

**Our Strategy**

Our goal is to become a fully integrated biopharmaceutical company focused on the discovery, development and commercialization of novel medicines for indications for which there are no existing or only inadequate therapies, with a current focus on DMD and CDI. The key elements of our strategy to achieve this goal are:

***Rapidly advance the development of our lead product candidates, ezutromid for DMD and ridinilazole for CDI.***

We are focusing our resources and business efforts primarily on rapidly advancing the development of ezutromid for the treatment of DMD and ridinilazole for the treatment of CDI. We believe that there is significant market potential for each of these product candidates. We also believe that the orphan drug designation of ezutromid and the QIDP and fast track designations of ridinilazole may expedite the regulatory review process for each of these product candidates and potentially provide market protection benefits. We expect to commence enrollment and dosing of patients in PhaseOut DMD at trial sites in the United Kingdom during the second quarter of 2016 and at trial sites in the United States during the third quarter of 2016. This Phase 2 clinical trial is expected to evaluate the benefits of longer-term dosing of ezutromid by measuring a number of endpoints related to muscle health and muscle function, including levels of utrophin protein in muscle fibers and levels of muscle fiber regeneration from muscle biopsies, changes in muscle inflammation and fat infiltration through the use of magnetic resonance imaging, or MRI, the distance walked during the six minute walk test and the North Star Ambulatory Assessment, a test of motor functions. We expect to report data periodically during this trial with the first set of 24-week muscle biopsy data from the first group of patients enrolled expected to be reported in January 2017. We reported top-line data from our double blind, randomized, active controlled Phase 2 clinical trial that evaluated ridinilazole compared to vancomycin for the treatment of CDI in November 2015. The primary endpoint of the trial was exceeded with ridinilazole achieving statistical superiority over vancomycin in sustained clinical response, with this superiority being driven by a large numerical reduction in recurrent disease compared to vancomycin. We are undertaking activities required to advance ridinilazole into Phase 3 clinical trials and, as detailed below, evaluating our options to maximize the commercial potential of ridinilazole.

***Maintain and expand our leadership in the field of utrophin modulation.***

We are developing ezutromid as the first of a new class of drugs called utrophin modulators. Utrophin modulation is an approach to treating DMD that is independent of the underlying dystrophin gene mutation. Our

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## [Table of Contents](#)

co-founder and scientific advisor, Professor Kay Davies at the University of Oxford, discovered utrophin and then developed the concept of utilizing utrophin modulation as a treatment potentially applicable to all DMD patients. Our DMD program was founded to develop and commercialize drugs for DMD using this approach to treatment. We plan to apply and enhance our existing knowledge, experience and proprietary rights to maintain and expand our leadership in the field of utrophin modulation. For example, in addition to the PhaseOut DMD clinical trial for ezutromid, we are also evaluating in a Phase 1 clinical trial a potential optimized formulation of ezutromid. We are also currently pursuing a broad utrophin modulator technology program consisting of internally developed second generation utrophin modulators designed to include improved pharmacokinetic properties and a pipeline of novel, future generation utrophin modulators with potential new mechanisms that we are developing in collaboration with the University of Oxford.

### ***Commercialize ezutromid for DMD in the United States and Europe with our own specialty commercial team.***

We hold exclusive worldwide commercialization rights for ezutromid for all indications. If ezutromid receives marketing approval, we intend to commercialize it initially in the United States and Europe with our own focused, specialized sales force that we plan to establish. We believe that medical specialists treating DMD are sufficiently concentrated that we will be able to effectively promote ezutromid with a targeted sales team in these and potentially other key territories. We also believe that our relationships with patient advocacy groups will strengthen our ability to market ezutromid. Outside of the United States and Europe, we plan to evaluate the potential for utilizing collaboration, distribution and other marketing arrangements with third parties to commercialize ezutromid.

### ***Maximize the commercial potential of ridinilazole.***

We hold exclusive worldwide commercialization rights for ridinilazole for all indications. We are evaluating our options to maximize the commercial opportunity for ridinilazole. We may seek third-party collaborators for the development and commercialization of ridinilazole. Although our preference is to seek a third-party collaborator, we also intend to continue to evaluate the relative merits of retaining commercialization rights for ourselves or seeking funding from government entities and philanthropic, non-government and not for profit organizations. In this evaluation, we expect to consider factors such as the anticipated development costs required to achieve marketing approval, the sales and marketing resources required in each territory in which we receive approval, the relative size of the market opportunity in such territory, the particular expertise of the third party and the proposed financial terms of the arrangement.

### ***Seek additional governmental and other third party grants and support.***

We have obtained development funding and other assistance from government entities, philanthropic, non-government and not for profit organizations and patient advocacy groups for our product candidates. For example, we have received grant funding and clinical trial support from Innovate UK and several DMD organizations, including groups based in the United States, such as the Muscular Dystrophy Association, Parent Project Muscular Dystrophy, Charley's Fund, Cure Duchenne, Foundation to Eradicate Duchenne and the Nash Avery Foundation, and groups based in the United Kingdom, such as Joining Jack. The Wellcome Trust Limited provided funding for our recently completed Phase 2 clinical trial of ridinilazole. We plan to continue to encourage these types of organizations to provide additional funding and support for our development programs.

## **Duchenne Muscular Dystrophy Overview**

Duchenne muscular dystrophy is one of the most common and the most severe form of muscular dystrophy. DMD is a fatal disease that results in progressive wasting of muscles throughout the body. DMD is caused by different genetic mutations affecting the dystrophin gene on the X-chromosome, and therefore predominately affects males. As a result of these genetic mutations, DMD patients are unable to produce dystrophin, a protein essential for maintaining healthy muscle function. Over time, the muscles of DMD patients deteriorate and are infiltrated by fat and scar tissue, which is referred to as fibrosis, leading to the loss of ambulation, loss of respiratory and cardiac function and ultimately death.

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## [Table of Contents](#)

Based on prevalence data published in July 2015 by Orphanet, a publicly available reference portal for information on rare diseases and orphan drugs, we estimate that there are approximately 50,000 DMD patients in the developed world and 250,000 DMD patients globally. According to an article published in 2013 in the peer reviewed journal *Muscle & Nerve*, approximately one in every 5,000 males is born with DMD. All ethnic groups are generally susceptible to DMD at approximately the same rates. Approximately two-thirds of DMD cases are due to inherited mutations, with the remainder being the result of spontaneous mutations in the dystrophin gene in patients with no familial history of the disease.

DMD is typically diagnosed in patients who are between two and seven years of age. The onset of the physical symptoms can be difficult to recognize, but early indicators of disease due to muscle weakness include difficulty walking or jumping, frequent falling over and becoming fatigued more easily. A preliminary diagnosis is typically made by measuring blood plasma levels of the enzyme creatine kinase, or CK. CK levels in DMD children are often ten to 100 times higher than CK levels in non-DMD children. A diagnosis of DMD is then confirmed through genetic testing using blood cells or muscle biopsy. In the United States and Europe, there are a number of newborn screening studies that can diagnose DMD at birth, although these tests are not yet routinely performed.

Initially, DMD affects the skeletal muscles in the arms, legs and trunk. By around 12 years of age, most DMD patients will need to use a wheelchair on a regular basis. Significant loss of skeletal muscle function takes place during the teenage years, and, while greater assistance is needed for activities involving arms, legs or trunk, most patients will retain use of their fingers, allowing them to write or use computers. Symptoms of scoliosis, or curvature of the spine, may also develop due to loss of trunk muscle function.

In the later stages of disease progression, life threatening heart and respiratory conditions become common. The function of the diaphragm and muscles responsible for the mechanical aspects of breathing deteriorates, leading to shortness of breath and build-up of fluid in the lungs and requiring ventilation at night and eventually on a 24-hour basis. DMD patients also develop cardiomyopathy, or enlarged hearts. The failure of the cardiac and respiratory systems typically leads to death by the time DMD patients reach their late twenties.

### ***Current DMD Treatments and Development Approaches***

There is currently no approved therapy for the treatment of DMD applicable to all DMD patients that seeks to alter the progression of the disease. Corticosteroids are prescribed to DMD patients from a young age to help treat symptoms of the disease. However, long-term use of corticosteroids is associated with severe side effects and concerns over weight gain. Other treatments to manage the symptoms of the disease include regular physiotherapy, surgery and mechanical support, such as wheelchairs and leg braces, and dietary supplements. The FDA recognizes the unmet medical need in DMD, the devastating nature of the disease for patients and their families and the urgency to make new treatments available. The FDA publicly stated in October 2014 that it remains committed to working with all companies to expedite the development and approval of safe and effective drugs to treat this disease. The Director of the FDA's Center for Drug Evaluation and Research also stated in a speech in July 2014 that the agency was willing to explore the use of all potential pathways for approval of DMD drugs, including accelerated approval, as appropriate. In June 2015, the FDA issued draft guidance on developing drugs for the treatment of DMD and related dystrophinopathies.

There are different approaches in development for the treatment of DMD, some of which seek to alter the progression of the disease by targeting the underlying genetic cause and others that seek to provide symptomatic relief. One approach that seeks to alter the progression of the disease involves targeting the specific genetic mutations known as nonsense mutations. Nonsense mutations create a premature stop signal in the translation of the genetic code and prevent the production of functional dystrophin protein. DMD caused by nonsense mutations affects approximately 13% of all DMD patients. Other disease modifying treatment approaches for DMD are based on a scientific approach known as exon-skipping. Exons are organic molecules known as nucleotides within the DNA strand that the cellular machinery translates to make truncated but functional protein.



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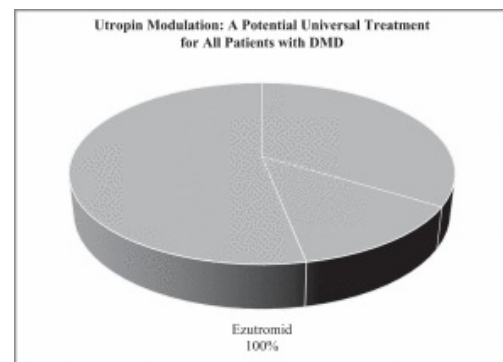
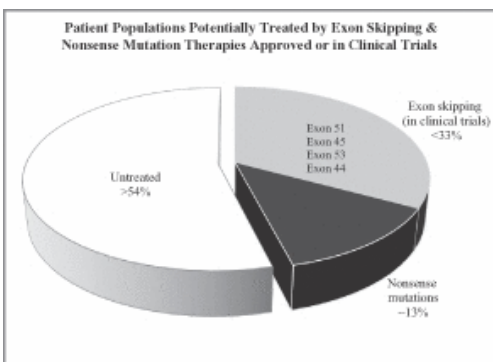
## [Table of Contents](#)

In a sub-population of DMD patients, synthesis of the dystrophin protein is disrupted because of mutations that may be due, among other things, to deleted exons. Exon-skipping technology seeks to allow the production of a truncated but still functional dystrophin protein. According to an article published in 2009 in the peer reviewed journal *Human Mutation*, skipping of the ten most common exons would treat in aggregate approximately 41% of all DMD patients. We believe that there are exon-skipping therapies currently in clinical development to address four of these exons and that skipping of these would treat in aggregate less than one-third of all DMD patients. A number of other treatments being developed seek to alleviate the symptoms of DMD. These include promotion of muscle tissue growth based on myostatin inhibition, anti-inflammatory and anti-fibrotic drugs, treatments to improve respiratory function, and gene therapy based approaches.

### **Our Utrophin Modulation Approach for the Treatment of DMD**

#### ***Our Approach***

We believe that our approach of utilizing utrophin modulation for DMD has the potential to slow or stop the progression of DMD in all patients with the disease. Utrophin is a naturally occurring protein that is functionally and structurally similar to dystrophin. The aim of utrophin modulation is to maintain the production of utrophin in all skeletal muscles, including the diaphragm, and the heart to compensate for the lack of dystrophin in DMD patients, thereby restoring and maintaining healthy muscle function. This approach to treating DMD is independent of the underlying dystrophin gene mutation. As illustrated in the figure below, we believe utrophin modulation has the potential to treat the entire population of DMD patients, unlike other DMD approaches that also seek to alter the progression of the disease but only address subsets of the total DMD population.



Further, we believe utrophin modulation could potentially be complementary to potential treatments for DMD based on other scientific approaches, including approaches that are focused on restoring dystrophin, such as exon-skipping and suppression of nonsense mutations. We also expect that utrophin modulation has the potential to benefit patients with Becker muscular dystrophy, a milder form of the disease in which the majority of patients produce low levels of shortened dystrophin.

#### ***The Role of Utrophin and Dystrophin in Muscle Fibers***

Utrophin and dystrophin are structurally and functionally similar proteins that perform a critical role in maintaining the proper function of muscle fibers, although at different times and in different settings. The roles of utrophin and dystrophin depend on whether the muscle fibers are mature, in the development stage or in the process of being repaired and regenerated. As discussed below, dystrophin plays an active role in maintaining the function of mature muscle fibers, while utrophin plays an active role in the development of new muscle fibers and in repairing damaged muscle fibers.

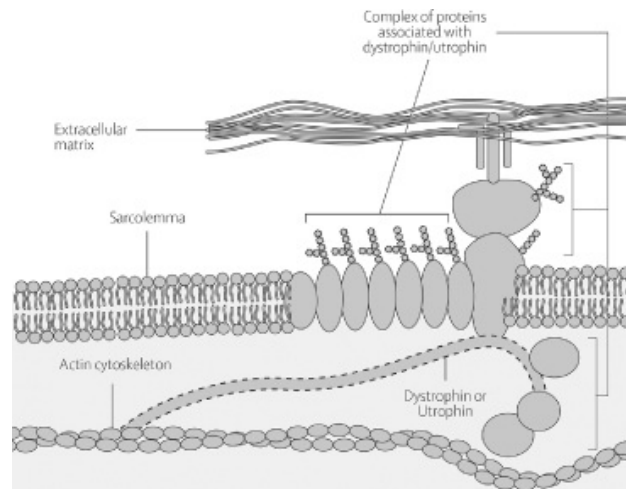
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## [Table of Contents](#)

### *Role of Dystrophin in Mature Muscle*

Each muscle in the body is made up of bundles of thousands of muscle fibers. Dystrophin and a group of different proteins that bind to dystrophin, which are called the Dystrophin Associated Protein Complex, are located at specific sites along the entire length of the muscle cell membrane, referred to as the sarcolemma, of every muscle fiber. Dystrophin works by linking the actin cytoskeleton, which is a part of the muscle fiber's contractile apparatus, to the Dystrophin Associated Protein Complex in the sarcolemma. The Dystrophin Associated Protein Complex, in turn, links the sarcolemma to the extracellular matrix, which binds the bundles of muscle fibers together. This link serves as a molecular shock absorber that helps to maintain stability and elasticity of muscle fibers during contraction and relaxation. In the absence of dystrophin, this linkage is lost and muscles become damaged, which leads to continual destructive rounds of muscle degeneration and regeneration and ultimately to progressive muscle wasting. The figure below depicts the Dystrophin Associated Protein Complex and illustrates the role of dystrophin (or utrophin) and the other proteins that make up this complex.

### **The Role of Dystrophin or Utrophin in the Associated Protein Complex**



### *Role of Utrophin in Developing Muscle*

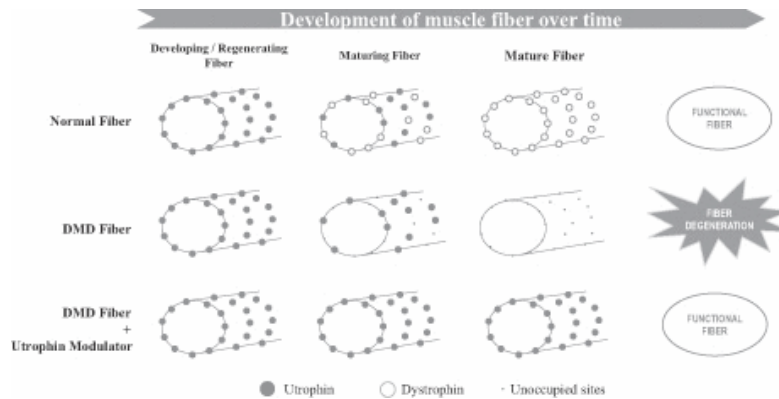
In both DMD patients and healthy individuals, utrophin and the proteins that comprise the Dystrophin Associated Protein Complex are highly localized at specific sites along the length of muscle fibers during fetal development. Utrophin production is then down regulated, or switched off, in the late stages of gestation. In the normal muscle fiber of healthy individuals, the production of dystrophin begins to replace utrophin at these sites in the maturing muscle fiber, eventually fully replacing utrophin. In the muscle fiber of DMD patients, who are unable to produce functional dystrophin to substitute for the down regulating utrophin, these sites in the muscle fiber become unoccupied, which leads to muscle degeneration as muscles mature.

### *Role of Utrophin in Regenerating Muscle*

In both DMD patients and healthy individuals, utrophin is localized to the neuromuscular junctions, which connect nerve fibers and muscles, and myotendinous junctions, which connect tendons and muscles. The other major role of utrophin is to stabilize newly regenerating muscle fibers as part of the natural repair process. After a muscle fiber is damaged, utrophin production switches on as needed to repair the damaged region and then switches off following successful repair.

### Expected Effect of Utrophin Modulation for DMD

We believe that our approach of utrophin modulation can be used to maintain the production of utrophin in maturing and mature muscle fibers and compensate for the lack of dystrophin in DMD patients, thereby restoring and maintaining healthy muscle function. The figure below illustrates the transition from utrophin to dystrophin production in the normal muscle fiber of a healthy individual, the effect of the lack of dystrophin production in the muscle fiber of a DMD patient and the expected effect of utrophin modulation in the muscle fiber of a DMD patient to compensate for the lack of dystrophin production.



### Origins of Our Utrophin Modulation Approach

Our co-founder and scientific advisor, Professor Kay Davies at the University of Oxford, discovered utrophin and then developed the concept of utilizing utrophin as a treatment potentially applicable to all DMD patients. Our DMD program was founded to develop and commercialize drugs for DMD using this approach to treatment. Professor Davies' research group at the University of Oxford developed transgenic lines of an *mdx* mouse that were genetically engineered to continually express utrophin protein. The *mdx* mouse is a naturally occurring animal model that is dystrophin deficient and is the standard disease model for studies of DMD. In these experiments, the continued expression of utrophin, even at levels just above those in a normal *mdx* mouse, had a meaningful, positive effect on muscle performance.

Our utrophin modulation program uses small molecule drugs that are designed to achieve the same effect seen in the transgenic *mdx* mouse experiments and to continually express utrophin to protect muscle fibers against DMD.

### Ezutromid Overview

Our most advanced utrophin modulator product candidate is ezutromid, an orally administered small molecule.

To date, we have conducted three Phase 1 clinical trials of ezutromid. We completed a Phase 1 clinical trial of ezutromid in healthy volunteers in 2012, a Phase 1b clinical trial of ezutromid in DMD patients in May 2014 and another Phase 1b clinical trial of ezutromid in DMD patients in September 2015. The second Phase 1b clinical trial of ezutromid in DMD patients evaluated the impact of diet on plasma levels of the drug. We refer to this second Phase 1b trial as our Phase 1b modified diet trial. Our Phase 1b modified diet trial met its primary objective with patients achieving plasma levels of ezutromid that may be sufficient to modulate the production of utrophin protein and possibly result in clinical benefit while following specific dietary guidance.

## [Table of Contents](#)

In all three Phase 1 clinical trials, ezutromid was well tolerated at all doses tested with no serious adverse events reported.

We are currently conducting a Phase 2 clinical trial of ezutromid in patients with DMD. We refer to this Phase 2 trial as PhaseOut DMD. We expect to commence enrollment and dosing of patients in PhaseOut DMD at trial sites in the United Kingdom during the second quarter of 2016 and at trial sites in the United States during the third quarter of 2016. The PhaseOut DMD trial will evaluate the benefits of longer-term dosing of ezutromid by measuring a number of endpoints related to muscle health and muscle function, including levels of utrophin protein in muscle fibers and levels of muscle fiber regeneration from muscle biopsies, changes in muscle inflammation and fat infiltration through the use of MRI, distance walked during a six minute walk test and the North Star Ambulatory Assessment. We expect to report data periodically during this trial with the first set of 24-week muscle biopsy data from the first group of patients enrolled expected to be reported in January 2017.

We are currently developing ezutromid as a flavored aqueous suspension for use in our PhaseOut DMD trial, and we believe this formulation is appropriate for administration to DMD patients, especially children.

We are also developing an optimized formulation of ezutromid that may be capable of achieving higher plasma levels in all patients treated with ezutromid. In March 2016, we reported interim data from our ongoing Phase 1 dose escalating clinical trial of ezutromid. The interim data from the trial showed that, in healthy volunteers, one of the two new formulations achieved an over ten-fold increase in plasma levels of ezutromid compared to the current clinical formulation of ezutromid. This formulation was selected to progress into the second part of the trial and undergo evaluation in patients with DMD. The Phase 1 dose escalating clinical trial is also expected to evaluate higher doses of the new formulation.

The FDA has granted orphan drug designation to ezutromid for the treatment of DMD, and the EMA has designated ezutromid as an orphan medicinal product. In the United States, if a product with orphan designation receives FDA approval, the FDA will not approve a later product for the same indication that uses the same active ingredient for seven years, unless the later product is shown to be clinically superior. In the European Union, if an orphan medicinal product receives EMA approval, the EMA will not approve a later product for the same therapeutic indication and with the same method of action for ten years after the orphan medicinal product receives EMA approval, subject to certain exceptions, including if the later product demonstrates clinical superiority.

### **Ezutromid Clinical Development**

To date we have completed three Phase 1 clinical trials of ezutromid, which are summarized in the table below. The design and results of each clinical trial are discussed in more detail further below.

<b>Trial</b>	<b>Description</b>	<b>Duration of Treatment</b>	<b>Total No. of Patients</b>	<b>No. of Patients Treated with Ezutromid</b>
Phase 1 healthy volunteer trial (Trial 01)	Double blind, placebo controlled, ascending single and multiple oral dose trial	10 days	49	36
Phase 1b DMD patient trial (Trial 02)	Open label, ascending single and multiple oral dose trial	10 days	12	12
Phase 1b modified diet trial (Trial 03)	Double blind, randomized, placebo controlled multiple oral dose trial with dietary guidance	14 days	12	12

#### ***Phase 1 Clinical Trial in Healthy Volunteers***

In 2012, we completed a double blind, placebo controlled, ascending single and multiple oral dose Phase 1 clinical trial of ezutromid in healthy volunteers. We conducted this clinical trial at a single site in the United Kingdom under approval from the Medicines and Healthcare products Regulatory Agency, or MHRA, and the

## Table of Contents

U.K. Health Research Authority Ethics Review Committee, or the Ethics Review Committee. We enrolled 49 healthy male subjects who were between 18 and 55 years of age. Forty-seven subjects completed the clinical trial. Two subjects withdrew from the clinical trial for reasons unrelated to ezutromid.

The primary objective of the clinical trial was to determine the safety and tolerability of single and multiple oral doses of ezutromid in healthy male subjects. The secondary objectives were to determine the single and multiple oral dose pharmacokinetics of ezutromid based on the concentration of the drug in blood plasma and the effect of fasting on the single oral dose pharmacokinetics of ezutromid.

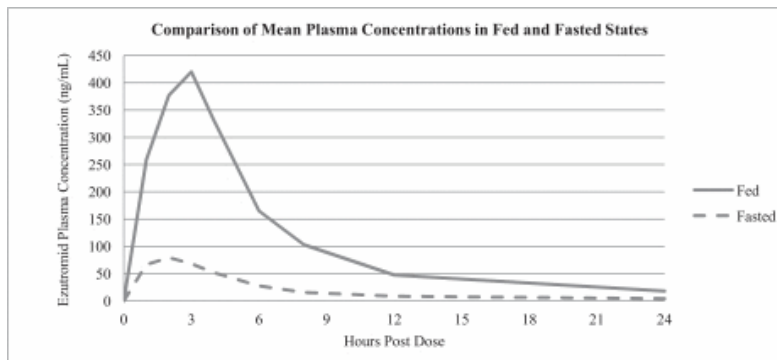
We conducted the clinical trial in two parts. Part 1 consisted of an ascending single dose study with a fasted effect evaluation. We evaluated a total of 32 subjects, who were divided into four equal cohorts of eight subjects each. Subjects in the four cohorts received one of the following doses of ezutromid: 50 mg/kg, 100 mg/kg, 200 mg/kg or 400 mg/kg. Six subjects in each cohort received ezutromid at the specified dose, and two subjects in each cohort received placebo. Each subject in the cohort receiving ezutromid at a dose of 200 mg/kg received doses under both fasted and fed conditions, while the subjects in the other cohorts received doses under normal, fed conditions, with no special dietary rules. One subject was removed during Part 1 of the clinical trial prior to dosing in a fasted state after testing positive for drug use.

Part 2 of the clinical trial consisted of a multiple ascending dose study. We evaluated a total of 16 subjects, who were divided into two cohorts of eight subjects each. In the first cohort, six subjects received 100 mg/kg doses of ezutromid and two subjects received placebo, in each case administered twice per day for ten days. In the second cohort, six subjects received 200 mg/kg doses of ezutromid and two subjects received placebo, in each case administered twice per day for ten days.

### Analysis of Trial Results

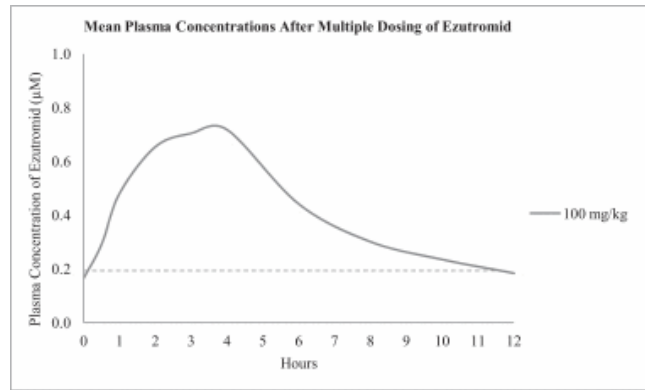
We observed the following results from this clinical trial:

- **Ezutromid was Well Tolerated.** In both Part 1 and Part 2 of the clinical trial, ezutromid was well tolerated at all doses tested. The only observed treatment related adverse event was pale stools, which only occurred at the 200 mg/kg and 400 mg/kg dose levels. The pale stools were attributed to unabsorbed ezutromid passing through the gastrointestinal tract at these higher dose levels. All other adverse events were mild in severity and resolved without treatment.
- **Higher Plasma Concentrations When Ezutromid Dosed with Food.** The dietary state of subjects in the clinical trial had a meaningful effect on systemic exposure. As illustrated in the figure below, after we administered a single dose of 200 mg/kg of ezutromid to subjects in the 200 mg/kg cohort of Part 1 of the clinical trial, the mean plasma concentration of drug in the blood over time, as determined by quantification of the area under the curve, in the subjects when they were in a fed state (n = 6) was approximately five times higher than the same subjects when they were in a fasted state (n = 5).



## Table of Contents

- **Targeted Plasma Levels Achieved in All Subjects after Multiple Dosing.** When we administered 100 mg/kg doses of ezutromid twice a day for ten days, the steady state plasma concentration achieved in all subjects was greater than 0.2  $\mu\text{M}$  (67 ng/mL), which was the concentration that corresponded to a 50% increase in utrophin protein levels in our preclinical studies described in more detail below. The mean blood plasma concentration of ezutromid in the 12 hours following administration of the final dose is illustrated in the figure below. However, there were differences among subjects, with the amount of time that each subject had plasma concentrations of utrophin protein greater than 0.2  $\mu\text{M}$  ranging from seven to 12 hours following dosing. Utrophin protein has a half-life of three to four weeks, and we believe that a few hours of exposure to ezutromid following regular dosing may lead to an accumulation of utrophin protein in muscle tissue over time. Subjects receiving 200 mg/kg doses of ezutromid twice a day for ten days did not achieve higher plasma concentrations of ezutromid than subjects receiving 100 mg/kg doses of ezutromid on this dosing schedule. As a result, we expect that the maximum dose of ezutromid in our future clinical trials will be 100 mg/kg.



- **Stable Plasma Levels of Ezutromid When Administered Through Multiple Dosing.** When we administered 100 mg/kg doses of ezutromid twice a day for ten days with meals, all subjects achieved stable, or steady state, blood plasma concentrations of drug within three to five days after the beginning of dosing. However, we observed differences in plasma concentrations across subjects, which we believe resulted from varying levels of activity of CYP1A, a liver enzyme that metabolizes ezutromid, in different subjects.

### Initial Phase 1b Clinical Trial in DMD Patients

In May 2014, we completed an open label, ascending single and multiple oral dose Phase 1b clinical trial in patients with DMD. We believe this clinical trial was the first time a utrophin modulator drug had been administered to DMD patients. We conducted this clinical trial at four sites in the United Kingdom under approval from the MHRA and the Ethics Review Committee. We enrolled 12 boys with DMD who were between five and 11 years of age.

The primary objective of the clinical trial was to determine the safety and tolerability of single and multiple oral doses of ezutromid. The secondary objectives were to determine the single and multiple oral dose pharmacokinetics of ezutromid and its metabolites in patients with DMD. In addition, an exploratory objective of the clinical trial was to quantify potential systemic activity biomarkers.

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## [Table of Contents](#)

We divided the patients into three cohorts of four boys each. Patients in each of the cohorts received different doses of ezutromid for 11 days. The patients in all of the cohorts were treated in a fed state. The clinical trial protocol provided for the administration of ezutromid within ten minutes after consuming a substantial meal. Patients in the first cohort received the following doses of ezutromid:

- a single 50 mg/kg dose on day one;
- 50 mg/kg doses administered twice per day on days two to ten; and
- a single 50 mg/kg dose on day 11.

Patients in the second cohort received the following doses of ezutromid:

- a single 100 mg/kg dose on day one;
- 100 mg/kg doses administered twice per day on days two to ten; and
- a single 100 mg/kg dose on day 11.

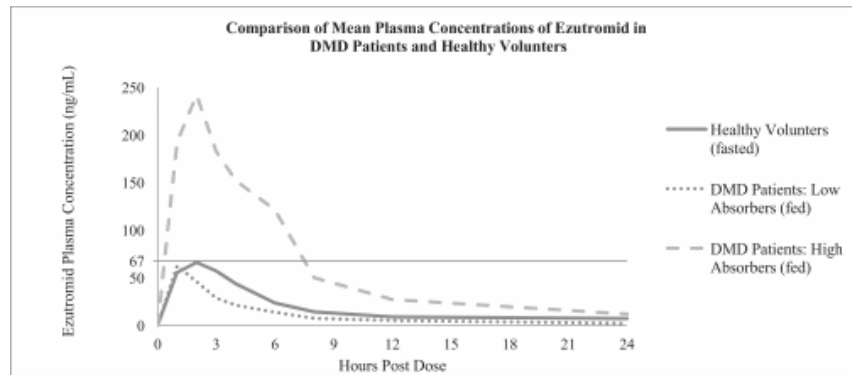
Patients in the third cohort received the following doses of ezutromid:

- a single 100 mg/kg dose on day one;
- 100 mg/kg doses administered three times per day on days two to ten; and
- a single 100 mg/kg dose on day 11.

### *Analysis of Trial Results*

We observed the following results from this clinical trial:

- ***Ezutromid was Well Tolerated.*** Ezutromid was well tolerated at all doses tested in this clinical trial with no serious adverse events reported. All reported adverse events were mild in severity and gastrointestinal in nature. In the opinion of the trial investigator, there were no clinically meaningful changes in physical examination, vital signs and hematology or biochemistry parameters in any of the patients. We also did not observe any issues with patient compliance.
- ***Patients had Variable Plasma Levels of Ezutromid; Possible Impact from Diet on Absorption of Ezutromid.*** We observed variability among patients in all three cohorts in plasma concentrations of ezutromid after administering multiple daily doses for eleven days. As illustrated in the figure below, the mean blood plasma concentrations of two of the 12 DMD patients, who we refer to as high absorbers, exceeded the target level of 0.2  $\mu$ M (67 ng/mL) for several hours following dosing. We determined this target level prior to conducting this clinical trial based on the composite results of our preclinical studies in tissue culture, or *in vitro* preclinical studies, and our preclinical studies in live animals, or *in vivo* preclinical studies, which indicated that this plasma concentration leads to an increase of approximately 50% in levels of utrophin protein. The mean plasma concentrations of the remaining ten patients, who we refer to as low absorbers, were less than this target level and similar to the levels achieved by fasted healthy volunteers in our completed Phase 1 clinical trial who had received a single 200 mg/kg dose of ezutromid. Nonetheless, we believe that the patients who did not achieve the target plasma level in the clinical trial may still have achieved a plasma level of ezutromid sufficient to modulate the production of utrophin and possibly result in a clinical benefit. This belief is based in part on the work of Professor Davies' research group, in which the continued expression of utrophin protein in transgenic lines of an *mdx* mouse, even at levels just above those in a normal *mdx* mouse, had a meaningful, positive effect on muscle performance.



We believe that the similarity of ezutromid plasma levels between the majority of DMD patients in this Phase 1b clinical trial and fasted healthy volunteers in our completed Phase 1 clinical trial may be due to a complex absorption profile in DMD patients that results from patients following low fat, low calorie diets. DMD patients often follow such diets due to concerns over the consequences of long-term corticosteroid use and potential resulting weight gain. In addition, we believe that other DMD disease-related factors, such as abnormal gastrointestinal physiology, may impact the absorption profile of DMD patients.

- **Patients Experienced a Reduction in CK and Other Enzyme Markers of Muscle Damage.** We observed a reduction compared to baseline in the enzymes CK, aspartate aminotransferase, or AST, and alanine aminotransferase, or ALT, in over 90% of the patients in the clinical trial during dosing with ezutromid. Other liver associated enzymes, gamma glutamyl transferase, alkaline phosphatase and albumin, showed no meaningful change from baseline over the same dosing period. The levels of CK, ALT and AST are typically low in healthy people. In DMD patients, however, damage to muscle fibers leads to the release of these enzymes from the muscle and accumulation in the blood. The mean reductions in CK, ALT and AST were statistically significant as compared to the baseline pre-dose levels ( $p < 0.05$ ). We determine statistical significance based on a widely used, conventional statistical method that establishes the p-value of clinical results. Typically, a p-value of 0.05 or less represents statistical significance. Following the end of dosing, the levels of these enzymes increased toward pre-dose levels. In addition, the reduction in CK was consistent with the results of a preclinical *in vivo* study that we conducted in the *mdx* mouse model, described in more detail below, in which we observed a reduction in CK following single daily dosing of ezutromid. We did not observe a correlation between the dose level of ezutromid administered and the degree of change in the levels of these enzymes. Although this was not a placebo controlled study and there may be other factors that influenced the results, we believed at the time that the lower levels of CK, AST and ALT compared to baseline potentially indicate a reduction in muscle damage and may be evidence of ezutromid activity. We consequently further evaluated this observed reduction in the enzyme markers of muscle damage in our subsequent Phase 1b modified diet trial. The results of the Phase 1b modified diet trial are described below.

#### **Phase 1b Modified Diet Clinical Trial**

In August and September 2015, we reported results from our Phase 1b modified diet trial in patients with DMD. We conducted this clinical trial at four sites in the United Kingdom under approval from the MHRA and the Ethics Review Committee. We enrolled a total of 12 boys with DMD who were between five and thirteen years of age.



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## [Table of Contents](#)

The primary objective of this clinical trial was to determine the pharmacokinetics of single and multiple oral doses of ezutromid in patients with DMD who followed specific dietary guidance that recommended balanced proportions of fat (30%), protein (25%) and carbohydrates (45%) and dosing with a glass of whole milk. We sought to achieve this dietary balance by requesting that patients, with support from research dietitians and the patients' legal guardians, consume a diet containing all of the major food groups, vitamins, minerals and dietary fiber, with a daily calorie intake that is appropriate for the age and activity level of each patient. The goal of this dietary guidance was to demonstrate an increase in the level of ezutromid in blood plasma compared to the blood plasma levels we observed among DMD patients in our initial Phase 1b clinical trial. The trial protocol included a number of secondary objectives, including evaluations of the safety and tolerability of single and multiple oral doses of ezutromid; the daily variability in the steady state pharmacokinetics of ezutromid; and the levels of CK as a potential biomarker of ezutromid activity.

We divided the patients into three cohorts of four patients each. The cohorts were randomized into three sequential 14-day treatment periods during which each patient in the clinical trial received ezutromid at a dose level of 1,250 mg, ezutromid at a dose level of 2,500 mg or a placebo. All doses were administered orally with 100 mL of whole milk and with patients having consumed either breakfast or an evening meal depending on the time of day. There was a wash out period, which is a period of time during which patients received no administration of the drug, of at least 14 days between each of the treatment periods. The clinical trial was blinded as to the order in which patients received the lower dose of drug, higher dose of drug or placebo. The patients in each cohort were dosed with either ezutromid or placebo as follows:

- a single dose on day one; and
- twice daily doses on days two to fourteen.

A follow-up safety visit was conducted twelve to fourteen days after administration of the final dose in the final treatment period. Each patient received specific dietary guidance after which there was a dietary run-in period of at least one week prior to the start of the first treatment period.

### *Analysis of Trial Results*

We observed the following results from our Phase 1b modified diet trial:

- ***Modified Diet had a Positive Impact on Plasma Absorption.*** In this trial, plasma absorption of ezutromid was increased in patients with DMD who followed specific dietary guidance that provided a balanced diet of fats, carbohydrates and proteins. Ten of the 12 patients achieved plasma exposure levels above 30 ng/mL for a mean of 14.0 hours in a 22-hour period on day 14 of the trial, with six of these patients achieving levels above 67 ng/mL for a mean of 8.2 hours in the same 22-hour period on day 14. Plasma levels of 30 ng/mL and 67 ng/mL correlate to an increase in utrophin levels of approximately 30% and 50%, respectively, based on our *in vitro* studies that were undertaken in myoblast cells from patients with DMD and myotubes from healthy individuals. The remaining two patients achieved maximum plasma exposure levels that exceeded 20 ng/mL. We believe that these two patients also achieved plasma exposure that may be sufficient to modulate the production of utrophin protein and possibly result in clinical benefit. The plasma exposure levels described above for all 12 patients were achieved after each received twice daily doses of 2,500 mg of ezutromid.

The impact of adhering to the modified diet on the absorption of ezutromid was further evidenced when we compared the results of seven patients who participated in our initial Phase 1b clinical trial in 2014 and our Phase 1b modified diet trial. All of these seven patients had increased plasma levels in the Phase 1b modified diet trial as compared to plasma levels observed in our initial Phase 1b trial. The increase in plasma levels ranged from approximately 100% to nearly 300%.

- ***Higher Plasma Levels of Ezutromid were Observed on Day 14 Compared to Day 1 in the Majority of Patients.*** In this trial, seven of the 12 patients had higher plasma levels when measuring plasma levels over time and calculating the area under the curve, or AUC, on day 14 compared to day 1. This

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## [Table of Contents](#)

accumulation of drug had not been observed in our previous Phase 1 clinical trial conducted in healthy volunteers or our initial Phase 1b clinical trial conducted in patients with DMD. We expect to evaluate the impact of longer-term dosing of ezutromid on plasma exposure in future clinical trials, including in our Phase 2 PhaseOut DMD clinical trial.

- **Treatment with Ezutromid did not Alter CK Levels, an Enzyme Biomarker of Muscle Damage, Compared to Placebo.** We did not observe a change in the levels of the enzyme CK compared to baseline when patients were treated with 1,250 mg or 2,500 mg of ezutromid twice a day for 14 days compared to placebo. In our initial Phase 1b clinical trial, in which there was no placebo control, we observed a statistically significant reduction in CK levels compared to baseline when dosing patients with ezutromid. We believe that the results from our Phase 1b modified diet trial indicate that the reduction in CK levels we observed previously are likely not related to treatment with ezutromid. We plan to evaluate CK levels, as well as additional biomarkers, over a longer duration of exposure to ezutromid in future clinical trials.
- **Ezutromid was Well Tolerated.** Ezutromid was well tolerated at all doses tested in this clinical trial, with no serious adverse events reported. All reported adverse events were mild in severity and resolved prior to completion of the study. The most common adverse event was pale stools and this was reported by patients in the placebo group and each of the ezutromid treatment groups. In the opinion of the trial investigator, there were no clinically meaningful changes in physical examination, vital signs and hematology or biochemistry parameters in any of the patients. We also did not observe any issues with patient compliance.

### ***BioMarin Phase 1 Clinical Trial in Healthy Volunteers***

In 2009, we assigned certain technology relating to our DMD program to BioMarin DMD Regulator Limited, or BioMarin. In 2010, BioMarin conducted a Phase 1 clinical trial of a prior formulation of ezutromid in 48 healthy adult volunteers. The clinical trial was conducted at a single site in the United Kingdom. BioMarin reported that ezutromid was well tolerated by the subjects in this clinical trial. Subjects in this trial achieved low systemic exposure of the drug, and there was variability in systemic exposure across subjects. Following this clinical trial of a prior formulation of ezutromid, BioMarin elected not to continue development of our assigned technology, citing pharmaceutical and pharmacokinetic challenges. In public statements, BioMarin indicated that it had concluded that the likelihood of achieving a therapeutic effect in DMD patients was highly unlikely. In 2010, BioMarin transferred the assets, and all commercialization rights, back to us. As described above, in our Phase 1 clinical trial of ezutromid in healthy volunteers, in which we administered ezutromid as a flavored aqueous suspension, we were able to achieve our target plasma concentrations in all subjects after multiple dosing.

### ***Ongoing Phase 2 'PhaseOut DMD' Clinical Trial***

We are conducting PhaseOut DMD, an open-label trial into which we plan to enroll up to 40 ambulatory boys between their fifth and tenth birthday inclusive who have a genetically confirmed diagnosis of DMD. The enrolled patients must be on stable doses of corticosteroids for a minimum of six months. We are conducting the trial at sites in the United Kingdom after receiving approval from the MHRA in January 2016 and in the United States after our investigational new drug application was cleared by the FDA in April 2016. We expect to commence enrollment and dosing of patients in PhaseOut DMD at trial sites in the United Kingdom during the second quarter of 2016 and at trial sites in the United States during the third quarter of 2016. We also are exploring how to enroll into a safety arm of PhaseOut DMD those patients who have participated in previous clinical trials of ezutromid, but who may not meet the criteria for enrollment into the efficacy arm of PhaseOut DMD.

Each patient will receive ezutromid at a dose level of 2,500 mg twice daily via oral administration. Patients will receive dietary guidance, consistent with that provided in our Phase 1b modified diet trial, to ensure they are

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## [Table of Contents](#)

receiving balanced proportions of fat, proteins and carbohydrates. At the time of dosing, patients will consume 100 mL of whole milk and will have also recently eaten either breakfast or an evening meal, depending on the time of day. The trial protocol specifies that there should be a gap of between eight to twelve hours between the breakfast and evening meal doses.

We have designed the PhaseOut DMD trial to evaluate the activity and safety of ezutromid and utrophin modulation and it will consist of the following four parts:

- **Screening and Baseline Stage:** A screening and baseline phase lasts up to 28 days for each patient. During this time, we take a number of baseline measurements. These include MRI analysis of upper leg muscle, a baseline muscle biopsy, blood samples for pharmacokinetic and enzyme biomarker measurements, and baseline measurements for functional tests, including the six minute walk test and the North Star Ambulatory Assessment.
- **Treatment Stage:** The treatment phase for each patient lasts a total of 48 weeks. During the treatment stage, an MRI analysis will be conducted at 12, 24, 36 and 48 weeks of treatment. Blood samples for PK and enzyme biomarker analysis will be taken at 4, 8, 12, 24, 36 and 48 weeks of treatment. In addition, a portion of the patients will have a second muscle biopsy taken at week 24, with the remaining patients having their second biopsy at week 48. Functional tests will be performed at 12, 24, 36 and 48 weeks of treatment.
- **Safety and Tolerability Follow-up Stage:** After the 48 week treatment phase, each patient will have a 30-day safety and tolerability follow up.
- **Trial Extension Phase:** If we observe evidence of beneficial activity related to ezutromid, we plan to seek approval from relevant regulatory authorities to allow all patients to continue to be dosed with a similar assessment regimen of ezutromid for a further 48 weeks.

## Clinical Trial Objectives

The primary objective of our PhaseOut DMD clinical trial is to investigate changes from baseline in leg muscle health using MRI. Reports in the peer reviewed literature have shown MRI has potential as a non-invasive biomarker to measure disease progression through measurement of changes in inflammation and fat infiltration in leg muscles. This trial will monitor disease progression after treatment with ezutromid by measuring changes from baseline in levels of muscle inflammation and fat infiltration in leg muscle during the course of the 48 week trial. We will also investigate if there are any relationships between changes in leg muscle MRI with blood plasma concentrations of ezutromid, which we will measure at baseline and over the course of the trial.

We also will investigate in our PhaseOut DMD clinical trial changes in utrophin expression in muscle and muscle fiber regeneration. The muscle biopsies taken during the trial will be used to investigate changes from baseline in utrophin protein expression and changes in muscle regeneration biomarkers.

The clinical trial is also expected to investigate a number of functional measures. These will include changes from baseline in distance walked during the six minute walk test, changes from baseline in the North Star Ambulatory Assessment, changes from baseline in a 10 meter run test, and changes from baseline in performance of upper limbs. We will also monitor changes in a variety of blood biomarkers related to muscle health, including the enzyme CK, during the trial.

We believe that these objectives collectively will enable us to better understand the potential benefits of long-term dosing with ezutromid on the progression of DMD in a pediatric population. We will also seek to understand if there are any potential relationships between changes in MRI, utrophin expression, muscle fiber regeneration and other assessments of muscle function. This trial will be the longest period of time that ezutromid has been dosed in patients and will increase the amount of safety and tolerability data for ezutromid.

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## [Table of Contents](#)

We expect to report data periodically during the trial with the first set of 24-week muscle biopsy data from the first group of patients enrolled expected to be reported in January 2017.

In addition, we continue to evaluate the timing and design of a larger, placebo-controlled trial of ezutromid.

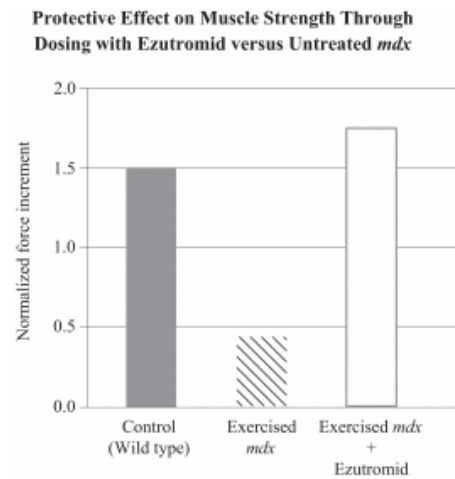
### **Ezutromid Preclinical Studies**

We have conducted a broad preclinical program for ezutromid in collaboration with Professor Kay Davies and her research group at the University of Oxford. The preclinical program consists of *in vitro* and *in vivo* studies designed to support the potential of ezutromid to modulate the expression of utrophin protein. The following is a summary of key observations from studies completed to date:

- **Increased Utrophin Levels in DMD Patient Derived Myoblast Cells.** We dosed *in vitro* muscle derived cells called myoblasts from DMD patients with ezutromid. After three days of dosing, we observed a two-fold mean increase in utrophin protein levels in these myoblast cells as compared to baseline levels.
- **Increased Utrophin Protein Expression in Heart, Diaphragm and Other Skeletal Muscles in *mdx* Mouse.** We dosed *mdx* mice with ezutromid daily for 28 days. Following the 28 days of dosing, we observed increased mean utrophin protein levels in the diaphragm ( $p < 0.05$ ) and the heart ( $p < 0.01$ ) as compared to untreated *mdx* mice. We also observed an increase in utrophin protein levels in the tibialis anterior, or TA, and extensor digitorum longus, or EDL, skeletal muscles. We also observed a mean increase in utrophin messenger ribonucleic acid, or mRNA, which is the precursor to utrophin protein. We believe that the good systemic distribution of drug observed in this experiment is important for DMD therapies that aim to maintain ambulation and prolong life for DMD patients.
- **Localized Utrophin Production at the Sarcolemma in *mdx* Mouse.** In the *mdx* mouse experiment described in the prior bullet, we observed an increase in utrophin protein in the TA and EDL skeletal muscles of *mdx* mice treated with ezutromid compared to untreated *mdx* mice as evidenced by an observable increase in the number of utrophin positive muscle fibers in these muscles. The increase in utrophin protein was localized at the sarcolemma, which is the required site of action for utrophin production in muscle. In a separate study in which we forced *mdx* mice to exercise, we observed a similar increase in utrophin positive muscle fibers in the diaphragm and the TA and EDL muscles, and an increase of utrophin levels within these muscle fibers, of *mdx* mice treated with ezutromid compared to untreated *mdx* mice. We believe that these results are noteworthy because DMD disease pathology is even more pronounced in the diaphragm and hind-limb muscles of the forced exercise *mdx* mice as compared to sedentary *mdx* mice.
- **Reduction in Secondary Markers of DMD in *mdx* Mouse.** We dosed *mdx* mice with ezutromid daily for 28 days. In this study, we observed a mean 75% reduction in CK levels as compared to untreated *mdx* mice after 15 days, which is the time at which muscle degeneration is at a maximum in this model. We continued to observe lower mean CK levels in the treated *mdx* mice group after 28 days, at which point muscle degeneration stabilized. Plasma levels of CK, muscle regeneration, inflammation and fibrosis are secondary markers of DMD. We also observed a reduction in the mean level of muscle fiber regeneration in *mdx* mice treated with ezutromid compared to untreated *mdx* mice as evidenced by a reduction in the number of muscle fibers with centrally localized nuclei, which are biomarkers of regeneration. We believe this resulted from the continual expression of utrophin, which protected the dystrophin deficient muscle fibers, and therefore reduced the amount of muscle regeneration. In addition, following treatment with ezutromid, we observed a mean reduction in overall skeletal muscle inflammation and fibrosis in the *mdx* mice treated with ezutromid compared to untreated *mdx* mice, which indicates a reduction in muscle fiber damage.
- **Protection of Muscle Function in Forced Exercise *mdx* Mouse.** We dosed *mdx* mice with ezutromid daily for 28 days and forced the mice to exercise during this treatment period. As illustrated in the figure below, at the end of dosing the forced exercise *mdx* mice treated with ezutromid demonstrated a

## Table of Contents

statistically significant mean increase in protection against exercise-induced forelimb weakness ( $p < 0.05$ ) compared to untreated forced exercise *mdx* mice. We measured forelimb weakness by the force increment required for the *mdx* mice to lose the strength to grip. The *mdx* mice treated with ezutromid exhibited forelimb strength comparable to that observed in the wild type control mice, which unlike *mdx* mice are not dystrophin deficient. The untreated *mdx* mice experienced a mean decrease in forelimb strength by the end of the 28 day study. Forcing the *mdx* mouse to exercise worsens the impact of DMD and we believe more closely approximates the pathology of human DMD patients.



- **Target Plasma Concentration to Achieve a 50% Increase in Utrophin Levels.** The composite results from our *in vitro* and *in vivo* preclinical studies indicated that a plasma concentration of approximately 0.2  $\mu\text{M}$  (67 ng/mL) leads to an increase of approximately 50% in levels of utrophin protein. These plasma concentration findings formed the basis of the target pharmacokinetic level that we have used in our clinical trials of ezutromid. As noted above, in the experiments performed by Professor Kay Davies, the continued expression of utrophin, even at levels just above those in a normal *mdx* mouse, had a meaningful, positive effect on muscle performance.

### Our Pipeline of Future Generation Utrophin Modulators

We plan to apply and enhance our existing knowledge, experience and proprietary rights to maintain and expand our leadership in the field of utrophin modulation. In addition to the PhaseOut DMD clinical trial for ezutromid, we are also evaluating in a Phase 1 clinical trial a potential optimized formulation of ezutromid. We are also currently pursuing a broad utrophin modulator technology program consisting of internally developed second generation utrophin modulators designed to include improved pharmacokinetic properties and a pipeline of novel, future generation utrophin modulators with new mechanisms that we are developing in collaboration with the University of Oxford. We also are progressing a program to develop biomarkers to measure the effects of our utrophin modulators in treating DMD.

### Potential Optimized Formulation of Ezutromid

In our Phase 1b modified diet clinical trial, patients who followed specific dietary guidance of appropriate proportions of fat (30%), protein (25%) and carbohydrates (45%) had increased plasma levels of ezutromid compared to our prior clinical trials in patients with DMD. Ten of 12 patients in the modified diet trial achieved plasma exposure levels above 30 ng/mL for a mean of 14.0 hours in a 22-hour period on day 14 of the trial, with six of these patients achieving levels above 67 ng/mL for a mean of 8.2 hours in the same 22-hour period on day

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## [Table of Contents](#)

14. Our long-term objective is to develop an optimized formulation of ezutromid capable of achieving higher plasma levels in all patients treated with ezutromid. We are working with third-party formulation companies, in parallel to the ongoing clinical development program of ezutromid, and have currently identified two potential formulations of ezutromid that we are evaluating in a Phase 1 two-part open label multiple dose clinical trial in healthy volunteers and patients with DMD.

The Phase 1 trial is divided into two parts. The first part evaluated both of the formulations in eight healthy volunteers. The second part is evaluating one of these formulations in eight patients with DMD. The primary objective of this clinical trial is to determine the pharmacokinetics of multiple oral doses of the new formulation of ezutromid. In March 2016, we reported interim data from the Phase 1 clinical trial. In healthy volunteers, one of the two new formulations achieved an over ten-fold increase in plasma levels of ezutromid compared to the current clinical formulation of ezutromid. This formulation was selected to progress into the second part of the trial and undergo evaluation in patients with DMD.

In the initial dosing period, patients who received a 250 mg fixed dose of the new formulation of ezutromid for seven days achieved plasma levels of ezutromid similar to those of patients who received a 2,500 mg fixed dose of the current formulation of ezutromid in the Phase 1b modified diet trial. The new formulation of ezutromid was generally well-tolerated in healthy volunteers and in the patients who received the first dose level of the new formulation of ezutromid. Participants in this trial are also following similar dietary guidance to those in the prior Phase 1b modified diet clinical trial. The Phase 1 clinical trial is now evaluating higher doses of the new formulation, and we expect to report top-line data from this trial in the third quarter of 2016. We expect to evaluate our options for further development of the new formulation after we have all of the data from the trial.

### ***Second Generation Utrophin Modulators***

We are developing internally a series of second generation utrophin modulators that are structurally related to ezutromid but are designed to have more favorable pharmacokinetic properties and achieve higher plasma levels of drug at a lower dose.

We have conducted preliminary preclinical studies on our second generation utrophin modulators and have observed the following:

- ***Improved Systemic Exposure.*** We administered single oral doses of one of our second generation utrophin modulators and ezutromid to rats *in vivo* and observed a ten to 40 fold increase in plasma concentrations with this second generation modulator as compared to ezutromid.
- ***Comparable Efficacy Data in mdx Preclinical Studies.*** We conducted an *in vivo* study of one of our second generation modulators in the *mdx* mouse model. In this study, we treated a group of sedentary *mdx* mice for five weeks with a single daily dose of one of our second generation utrophin modulators and compared the group to a control group of untreated sedentary *mdx* mice. In the treated *mdx* mice, we observed increased utrophin expression and muscle function in amounts that were comparable in each case to those observed in our preclinical testing of ezutromid.

We are conducting further preclinical efficacy studies and in parallel we are conducting safety and toxicology preclinical studies.

### ***Strategic Alliance with the University of Oxford***

In November 2013, as part of our program for the development of additional utrophin modulators, we formed a strategic alliance with the University of Oxford. Under this alliance, we acquired an exclusive option to license intellectual property that is generated as part of our research in utrophin modulation as part of the alliance. We announced in November 2015 a multi-year extension of the strategic alliance with the University of Oxford that will run until November 2019, with an option to extend it for a further 12 months. The goal of our

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## [Table of Contents](#)

collaboration with the University of Oxford is to identify and develop future generations of novel utrophin modulators that will include new mechanisms that could complement ezutromid and our second generation modulators. In December 2015, we reported achievement of the first research milestone as part of the collaboration with the nomination of two series of utrophin modulators for progression into lead optimization studies. These two series of compounds are structurally distinct from ezutromid, with one series having a potential new utrophin modulation mechanism that appears to be distinct from ezutromid.

### ***Biomarker Program***

We believe that the development of new biomarkers could play an important role in furthering our understanding of the potential benefits of utrophin modulators in treating DMD. A biomarker is a measurable biological or chemical change that is believed to be associated with the severity or presence of a disease or other physiological state of an organism. We expect our biomarkers will be related to the mechanism of utrophin modulation and will examine other aspects of muscle health, including inflammation and muscle fiber regeneration. Our biomarker program includes the following:

- quantifying numbers of utrophin positive fibers and levels of utrophin protein in each fiber from muscle biopsies using immunofluorescence and immunohistochemistry;
- evaluating muscle biopsies to quantify numbers of regenerating fibers; and
- developing other serum biomarkers that will quantify muscle damage.

### ***Clostridium difficile Infection Overview***

*Clostridium difficile* Infection is a bacterial infection of the colon that produces toxins causing inflammation of the colon and severe diarrhea. CDI can also result in more serious disease complications, including pseudomembranous colitis, bowel perforation, toxic megacolon and sepsis. CDI represents a serious healthcare issue in hospitals, long-term care homes and, increasingly, in the wider community. We estimate there are over one million cases of CDI each year in the United States and Europe, based on an epidemiology report on CDI that was published in 2015 by Decision Resources, a healthcare research and consulting company. In addition, CDI is responsible for approximately 29,000 deaths per year in the United States, according to a study published in the *New England Journal of Medicine* in 2015. A separate study published in 2012 in *Clinical Microbiology and Infection*, a peer reviewed journal published by the European Society of Clinical Microbiology and Infectious Diseases, indicated that CDI may be underdiagnosed in approximately 25% of cases. A study published in *The Journal of Hospital Infection*, a peer reviewed journal published by the Healthcare Infection Society, reported that CDI is two to four times more common than hospital associated infections caused by methicillin-resistant *Staphylococcus aureus*, a bacterium frequently associated with such infections. The Healthcare Cost and Utilization Project, a family of databases developed through a federal-state-industry partnership sponsored by the Agency for Healthcare Research and Quality of the U.S. Department of Health and Human Services, reported an approximate 3.5 fold increase in hospital stays associated with CDI between 2000 and 2008. The economic impact of CDI is significant. A study published in 2012 in *Clinical Infectious Diseases* estimated that acute care costs total \$4.8 billion per year in the United States alone.

CDI originates from a bacterium known as *Clostridium difficile*, or *C. difficile*. *C. difficile* sometimes can be a harmless resident of the gastrointestinal tract. The complex community of microorganisms that make up the natural gut flora usually moderates levels of *C. difficile*. The natural gut flora are an essential part of the normal function of the gastrointestinal tract and also have wide implications to human health, such as the proper function of the immune system. CDI typically develops following the use of broad spectrum antibiotic agents that can cause widespread damage to the natural gut flora and allow overgrowth of *C. difficile*. Hypervirulent *C. difficile* strains have also emerged and are frequently associated with more severe disease. In the United States, the hypervirulent strain, ribotype 027, accounts for approximately one-third of all CDI cases.

The primary clinical issue with CDI is disease recurrence. This is in contrast to other bacterial threats for which drug resistance is the principal concern. According to an article published in 2012 in the peer reviewed

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## [Table of Contents](#)

journal *Clinical Microbiology and Infection*, up to 25% of patients with CDI suffer a second episode of the infection. The risk of further recurrence rises to 65% after a patient suffers a third episode of CDI. In addition, each episode of recurrent disease is associated with greater disease severity and higher mortality rates. Recurrent disease is associated with an increased burden on the healthcare system.

In 2013, the CDC highlighted CDI as one of three pathogens that pose an immediate public health threat and require urgent and aggressive action. In 2012, the Generating Antibiotics Incentives Now Act provisions of the FDA Safety and Innovation Act, or GAIN, became law. The goal of GAIN is to encourage the development of new antibiotics that treat specific pathogens, including *C. difficile*, which cause serious and life threatening infections.

### **Current CDI Treatments**

Existing treatment options for CDI are limited. The current standard of care for CDI is treatment with vancomycin or offlabel use of metronidazole, both of which are broad spectrum antibiotics. Although these antibiotics reduce levels of *C. difficile*, both also cause significant collateral damage to the gut flora as a result of their broad spectrum of activity. This collateral damage to the gut flora leaves patients vulnerable to recurrent CDI. A review published in 2012 in the peer reviewed journal *International Journal of Antimicrobial Agents* reported recurrence rates of 24.0% for vancomycin and 27.1% for metronidazole. Metronidazole is frequently used in mild or moderate cases of CDI and has been associated with a number of side effects. The antibiotic fidaxomicin was recently approved in the United States and the European Union, but it has not been shown to be superior to vancomycin in the treatment of patients with the hypervirulent strain ribotype 027.

### **Ridiniilazole for the Treatment of CDI**

We are developing ridiniilazole as an orally administered small molecule antibiotic for the treatment of CDI. Ridiniilazole is designed to selectively target *C. difficile* bacteria without causing collateral damage to the gut flora and thereby reduce CDI recurrence rates. The active ingredient in ridiniilazole is a bis-benzimidazole tetrahydrate. We believe, based on preclinical studies conducted to date, that ridiniilazole is part of a novel structural class of antibiotics that is distinct from the major classes of marketed antibacterials.

In November 2015, we reported top-line results from our double blind, randomized, active controlled Phase 2 clinical trial that evaluated ridiniilazole compared to the current standard of care, vancomycin, for the treatment of CDI. The Phase 2 clinical trial exceeded its primary endpoint of non-inferiority, with ridiniilazole achieving statistical superiority over vancomycin in sustained clinical response, or SCR. The statistical superiority was driven by a large numerical reduction in recurrent disease compared with vancomycin. We subsequently reported that preliminary analysis of the data from our Phase 2 clinical trial also showed ridiniilazole to be highly preserving of the gut microbiome compared to patients who received vancomycin, who experienced substantial damage to the gut microbiome which for many patients persisted during the 30-day post-treatment period. We expect to continue to report further data from this trial at future medical and scientific conferences. We are undertaking activities required to advance ridiniilazole into Phase 3 clinical trials. We are also evaluating our options for the future development and commercialization of ridiniilazole. Our preferred option is to seek third-party collaborators but we are continuing to evaluate the relative merits of retaining commercialization rights for ourselves or seeking funding from government entities and philanthropic, non-government and not for profit organizations.

In February 2015, we initiated an exploratory, open label, active controlled Phase 2 clinical trial evaluating ridiniilazole compared to fidaxomicin for the treatment of CDI. Enrollment and dosing of patients is ongoing and we expect to report top-line results from this clinical trial in the second half of 2016. We expect the results of this clinical trial will help to inform the design of future Phase 3 clinical trials and the commercial positioning of ridiniilazole. The FDA has designated ridiniilazole as a qualified infectious disease product, or QIDP. The QIDP incentives are provided through GAIN. The QIDP designation provides for priority review by the FDA,



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## [Table of Contents](#)

eligibility for “fast-track” status and extension of statutory exclusivity periods in the United States for an additional five years upon FDA approval of the product for the treatment of CDI. The FDA granted fast track status for ridinilazole in July 2015.

### **Ridinilazole Clinical Development**

#### *Phase 1 Clinical Trial in Healthy Volunteers*

In 2013, we completed a randomized, partially blind, placebo controlled Phase 1 clinical trial of ridinilazole in healthy volunteers. We conducted this clinical trial at a single site in the United Kingdom under approval from the MHRA and the Ethics Review Committee. We enrolled 56 healthy male subjects in the clinical trial who were between 18 and 55 years of age. The primary objective of the clinical trial was to determine the safety and tolerability of single and multiple ascending oral doses of ridinilazole. The secondary objectives included determining the single and multiple oral dose pharmacokinetics of ridinilazole, assessing the effect of food on systemic exposure of ridinilazole and assessing the effect of multiple oral doses of ridinilazole on gut flora.

We conducted the clinical trial in two parts. Part 1 consisted of an ascending single dose study and a food effect evaluation study. In Part 1, we evaluated a total of 40 subjects, divided into the following six cohorts:

- four fasted subjects, randomized for three subjects to receive a single 2 mg dose of ridinilazole and one subject to receive placebo;
- four fasted subjects, randomized for three subjects to receive a single 20 mg dose of ridinilazole and one subject to receive placebo;
- eight fasted subjects, randomized for six subjects to receive a single 100 mg dose of ridinilazole and two subjects to receive placebo;
- eight fasted subjects, randomized for six subjects to receive a single 400 mg dose of ridinilazole and two subjects to receive placebo;
- eight fasted subjects, randomized for six subjects to receive a single 2,000 mg dose of ridinilazole and two subjects to receive placebo; and
- eight subjects, randomized for six subjects to receive a single 1,000 mg dose of ridinilazole under fasted conditions and a single 1,000 mg dose under fed conditions, and two subjects to receive two single doses of placebo on the same dosing schedule. The doses under fed and fasted conditions were separated by a minimum of six days.

Part 2 of the clinical trial consisted of a multiple dose study. In Part 2, we evaluated a total of 16 subjects, who were divided into the following two cohorts:

- eight subjects randomized for six subjects to receive 200 mg doses of ridinilazole twice per day for nine days with a single final dose on day ten and two subjects to receive placebo on the same dosing schedule; and
- eight subjects randomized for six subjects to receive 500 mg doses of ridinilazole twice per day for nine days with a single final dose on day ten and two subjects to receive placebo on the same dosing schedule.

#### *Analysis of Trial Results*

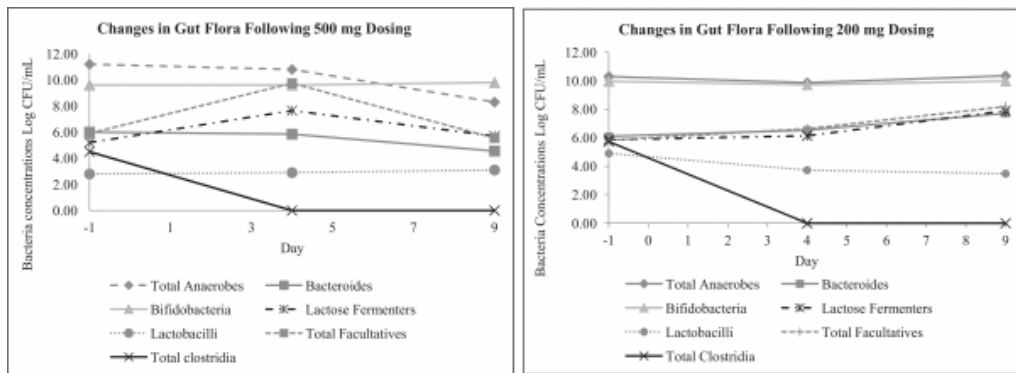
We observed the following results in this clinical trial:

- ***Ridinilazole was Well Tolerated.*** Ridinilazole was well tolerated at all doses tested in the clinical trial. The incidence of adverse events in the clinical trial was low for patients treated with ridinilazole and comparable to the incidence of adverse events for patients receiving placebo. The majority of the adverse events that were considered to be possibly related to ridinilazole were classified as

## Table of Contents

gastrointestinal disorders and were mild in severity and resolved without intervention. One patient withdrew from the clinical trial after suffering from appendicitis on day one. The trial investigator determined this serious adverse event was unlikely to be related to treatment with ridinilazole.

- **Ridinilazole was Retained in the Gastrointestinal Tract.** Ridinilazole was targeted to the gastrointestinal tract, which is the site where CDI infections occur in the body. Systemic exposure was close to or below the level of detection in both fed and fasted subjects.
- **Ridinilazole was Highly Selective for Total Clostridia Bacteria with Minimal Impact on Other Natural Gut Flora.** We measured levels of bacteria in fecal samples from Part 2 of the clinical trial for gut flora composition on the day prior to commencement of dosing and on days four and nine of drug administration during the clinical trial. As illustrated in the figure below, in both the 200 mg and 500 mg dose cohorts, median levels of key bacteria groups that comprise the natural gut flora remained relatively constant during this period and did not fluctuate substantially from baseline. The one exception was the total *clostridia* bacterial group. The counts of total *clostridia* decreased from the baseline level to zero by day four of dosing and remained at zero on day nine of dosing. *C. difficile* is a member of the total *clostridia* group. We did not detect any *C. difficile* viable cells or spores in the fecal samples of any of the healthy volunteer subjects at any point during the clinical trial. Bacteria levels are shown in the figure below on a logarithmic scale, which condenses the wide range of values to a format showing the relative differences in values. We believe these data, which are consistent with the data from our preclinical studies, support the highly selective antibiotic effect of ridinilazole.



### Phase 2 Clinical Trial in Patients with CDI

In November 2015, we reported top-line results from our randomized, double blind, active controlled, multicenter, Phase 2 clinical trial of ridinilazole in patients with CDI and subsequently have announced additional data. We have referred to this as our Phase 2 proof of concept clinical trial.

We conducted this clinical trial at approximately 35 sites in the United States and Canada. The trial was conducted under an Investigational New Drug Application, or IND, that we submitted to the FDA on January 21, 2014. We completed enrollment of 100 patients in this clinical trial in September 2015. The trial randomized patients in a one-to-one ratio to receive either a 200 mg dose of ridinilazole administered twice per day for ten days or a 125 mg dose of vancomycin administered four times per day for ten days. Patients who received ridinilazole were also administered a placebo twice a day for ten days to ensure the trial remained blinded.

The primary objective of this clinical trial was to evaluate the efficacy of ten days of dosing with ridinilazole compared to treatment with vancomycin. The primary efficacy endpoint was non-inferiority on sustained clinical response, or SCR, which is defined as clinical cure based on the resolution of diarrhea at the

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## [Table of Contents](#)

test of cure, or TOC, visit on day 12 and no recurrence of CDI within 30 days after the end of treatment. The secondary efficacy endpoints were investigator assessed clinical response at the TOC visit and rate of recurrence of CDI within 30 days after the end of treatment. Secondary objectives of this clinical trial were the assessment of the safety and tolerability of ten days of dosing of ridinilazole compared to vancomycin, the plasma and fecal concentrations of ridinilazole in patients with CDI who received ridinilazole and the health status of CDI patients who received ten days of treatment of ridinilazole compared to patients who received ten days of treatment of vancomycin. We also assessed the impact of ridinilazole on the gut flora of patients in the clinical trial as one of a number of exploratory objectives.

Our Phase 2 proof of concept trial met its primary endpoint with ridinilazole achieving a SCR rate of 66.7% compared to 42.4% for vancomycin (non-inferiority margin of 15%,  $p=0.0004$ ). This also represents statistical superiority of ridinilazole over vancomycin using the pre-specified 90% confidence interval. Ridinilazole achieved a clinical cure rate of 77.8% compared to 69.7% for vancomycin, and ridinilazole achieved a recurrence rate of 14.3% compared to 34.8% for vancomycin during the 30-day post-treatment period. The primary analysis was conducted on the modified intent-to-treat, or mITT, population (36 patients dosed with ridinilazole, 33 patients dosed with vancomycin) that comprised patients with CDI confirmed by the presence of free toxin. The results of the mITT population were consistent with the intent-to-treat, or ITT, population (50 patients dosed with ridinilazole, 50 patients dosed with vancomycin) and the per protocol, or PP, population (31 patients dosed with ridinilazole, 25 patients dosed vancomycin).

In March 2016, we reported preliminary data on the impact ridinilazole and vancomycin had on the gut microbiome of the patients in the trial. The analysis showed that patients treated with ridinilazole exhibited no further damage to their microbiome during therapy with a proportion of patients showing initial evidence of recovery of key bacterial groups with roles in protecting from CDI. We observed that vancomycin treated patients suffered substantial damage to their microbiome during treatment and that this damage persisted in many patients during the 30-day post-treatment period. Ridinilazole was generally well tolerated and the overall adverse event profiles of ridinilazole and vancomycin were comparable.

We expect to report more detailed data from this trial at medical and scientific conferences during 2016.

### ***Ongoing Phase 2 Exploratory Clinical Trial of Ridinilazole Compared to Fidaxomicin***

We have initiated a randomized, open label, active controlled, multicenter Phase 2 clinical trial evaluating ridinilazole compared to fidaxomicin for the treatment of CDI. In February 2015, we enrolled and dosed the first patient in this clinical trial. This clinical trial will generate further data comparing ridinilazole to fidaxomicin, a recently launched CDI antibiotic, and we expect the results of this clinical trial will help to inform the design of future Phase 3 clinical trials of ridinilazole and help to inform its commercial positioning. We are conducting this clinical trial at sites in the United Kingdom, and from the second quarter of 2016, at additional sites in Europe and the United States. We expect to enroll approximately 30 patients in this clinical trial. We expect the trial will randomize patients in a one-to-one ratio to receive either a 200 mg dose of ridinilazole administered twice per day for ten days or a 200 mg dose of fidaxomicin administered twice per day for ten days. We expect to report top line data from this clinical trial in the second half of 2016.

The primary efficacy objective of clinical this trial is to determine the safety and tolerability of ten days of dosing with 200 mg of ridinilazole compared to dosing with 200 mg of fidaxomicin. The secondary objectives of the clinical trial are to assess the following:

- the plasma pharmacokinetics of ridinilazole in patients with CDI;
- the qualitative and quantitative effect of ridinilazole and fidaxomicin on gut flora;
- the plasma, urine and fecal concentrations of ridinilazole and its metabolites; and
- the efficacy of ten days of dosing with ridinilazole compared to fidaxomicin for the treatment of CDI.

The measurement of efficacy will be based on investigator assessed clinical response at the TOC visit, with clinical cure defined as resolution of diarrhea while on treatment and maintained at the TOC visit, and sustained

[Table of Contents](#)

clinical response, defined as clinical cure at the TOC visit and no recurrence of CDI within 30 days after the end of treatment.

**CDI Preclinical Data**

In a range of preclinical studies, ridinilazole demonstrated an encouraging profile as a potential antibiotic for the treatment of initial CDI and reduction of CDI recurrence. The following is a summary of key observations from these studies:

- Potency Against *C. difficile*.** We screened ridinilazole *in vitro* against panels of *C. difficile* clinical isolates from the United States and the United Kingdom. In these studies, ridinilazole displayed a potent bactericidal effect against all clinical isolates of *C. difficile*, including hypervirulent strains, such as ribotype 027. Ridinilazole was more potent than both vancomycin and metronidazole, and was either equally potent to, or more potent than, fidaxomicin. We have also tested ridinilazole against a panel of *C. difficile* clinical isolates that maximize the diversity of resistance to key classes of commonly used antibiotics. Ridinilazole did not display evidence of cross resistance with other classes of key antibiotics in common use.
- Targeted Spectrum of Activity.** We conducted *in vitro* testing of ridinilazole, vancomycin, metronidazole and fidaxomicin against a wide panel of bacteria that are commonly found in the gut flora and are necessary for normal function of the gastrointestinal tract and also have wide implications to human health, such as the proper function of the immune system. As illustrated in the figure below, in this study ridinilazole had a minimal antibiotic effect against these beneficial bacterial groups. Ridinilazole also displayed higher selectivity for *C. difficile* in this study as compared to vancomycin, metronidazole and fidaxomicin and published data for cadazolid, an antibiotic that is currently in Phase 3 clinical development by another company. *In vitro* potency is measured by determining the concentration of a drug (in micrograms per liter) needed to inhibit the growth of 90% of the bacterial strains being tested, referred to as a MIC<sub>90</sub> measurement. A high number, typically higher than 256, indicates a weak antimicrobial effect, and a low number, typically less than eight, indicates a potent antimicrobial effect. We believe that the targeted spectrum of activity for ridinilazole seen in this study compared to the relatively broad spectrum of activity of other antibiotics indicates the potential for ridinilazole to selectively target *C. difficile* bacteria without causing collateral damage to the gut flora and thereby reduce CDI recurrence rates.

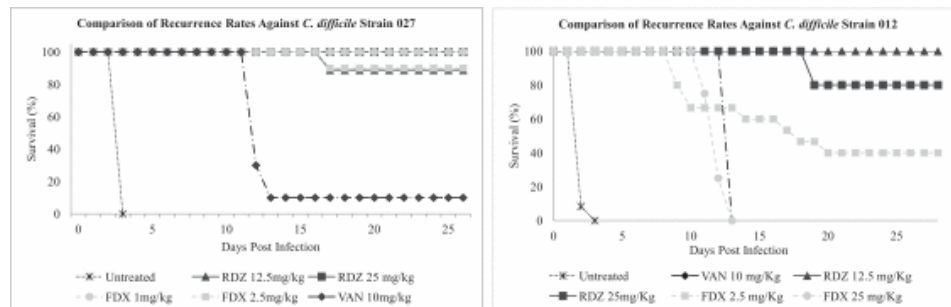
**Profile of Selectivity of Ridinilazole vs. Other CDI Antibiotics**

Key Bacterial Groups	Spectrum of Activity – MIC <sub>90</sub> (µg/mL)					Antibiotic effect
	RDZ	MTZ	VAN	FDX	CAD*	
<i>Bacteroides</i> spp.	>512	2	128	>512	4	<div style="display: flex; flex-direction: column; align-items: center;"> <div style="border: 1px solid black; width: 20px; height: 20px; background-color: #f0f0f0; margin-bottom: 2px;"></div>                     Weak                 </div> <div style="display: flex; flex-direction: column; align-items: center;"> <div style="border: 1px solid black; width: 20px; height: 20px; background-color: #d0d0d0; margin-bottom: 2px;"></div>                     Medium                 </div> <div style="display: flex; flex-direction: column; align-items: center;"> <div style="border: 1px solid black; width: 20px; height: 20px; background-color: #808080; margin-bottom: 2px;"></div>                     Potent                 </div>
<i>Bifidobacterium</i> spp.	>512	128	1	0.125	0.5	
<i>Lactobacillus</i> spp.	>512	>512	>512	>512	-	
<i>Eggerthella lenta</i>	>512	0.5	4	≤0.03	0.5	
<i>Peptostreptococcus</i> spp.	64	1	0.5	≤0.03	-	
<i>Staphylococcus aureus</i>	>512	>512	1	16	1.0	

RDZ: Ridinilazole      VAN: Vancomycin      CAD: Cadazolid  
 MTZ: Metronidazole      FDX: Fidaxomicin

## Table of Contents

- **Protection Against CDI Recurrence.** In a hamster model, we infected one group of hamsters with the hypervirulent CDI strain ribotype 027 and a second group of hamsters with a second CDI strain ribotype 012. In the United States, the hypervirulent CDI strain ribotype 027 accounts for approximately one third of all CDI cases. We then treated hamsters from each of the two infected groups with different doses of ridinilazole, vancomycin and fidaxomicin for five days. We evaluated disease recurrence over the 21 days following treatment. In this hamster model, a hamster fatality within the first five days is a result of initial *C. difficile* infection, while a fatality from day six to day 25 is a result of recurrent disease. As illustrated in the figure below, the hamsters from both infected groups that were treated with two different doses of ridinilazole had survival rates of 90% to 100% against strain ribotype 027 and 80% to 100% against strain ribotype 012. These survival rates were higher than hamsters treated with vancomycin (0% to 10% survival rates) for both CDI strains, comparable to hamsters treated with two different doses of fidaxomicin against strain ribotype 027 (90% to 100% survival rates) and higher than hamsters treated with two different doses of fidaxomicin against strain ribotype 012 (0% to 40% survival rates). All infection control hamsters received placebo and died by the second day following infection.



- **Inhibition of Sporulation.** In the *in vitro* testing of ridinilazole described above, we treated *C. difficile* cells with different concentrations of ridinilazole and measured the percentage of spores formed 96 hours after treatment. Untreated cells had a 100% conversion rate into *C. difficile* spores, which are the dormant protected form of the bacteria, after 96 hours. In this study, treatment with ridinilazole resulted in a meaningful reduction in spore count compared with untreated cells against all strains of *C. difficile* tested. We believe the reduction in sporulation may benefit rates of recurrent disease as the spores are highly resistant to standard cleaning practices and lead to increased risks of environmental persistence and disease transmission.
- **Reduction in Toxin and Inflammation Levels.** In an *in vitro* study, Caco-2 cells, a type of cell found in the colon of humans commonly used in studies of intestinal function, were exposed to *C. difficile* and then treated with ridinilazole, metronidazole and vancomycin or were untreated to act as a control. Following treatment with ridinilazole, toxin A levels were reduced by 91%, toxin B was not detected and IL-8 levels were reduced by 74%. Metronidazole and vancomycin had minimal effect on toxin A or B concentrations, and IL-8 concentrations were similar to control. Toxins A and B are produced by *C. difficile* to elicit an inflammatory response, including IL-8 release, which results in the symptoms of the disease including severe diarrhea. We believe that these data indicate that ridinilazole has the potential to reduce the severity of disease symptoms and that it has the potential to be more effective than current treatment options.
- **Concomitant Antibiotic Use.** In an *in vitro* bacterial culture study, we administered ridinilazole in combination with selected other antibiotics. In this study, concomitant use of antibiotics had neither a synergistic nor an antagonistic effect on the MIC90 values of ridinilazole against the *C. difficile* strains tested. We believe these results indicate that concomitant use of other antibiotics will not diminish the potency of ridinilazole. We believe this is an important finding because a significant portion of CDI patients receive antibiotic treatment for persistent or new infections.

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## [Table of Contents](#)

- **Low Propensity for Resistance.** In an *in vitro* study, we treated *C. difficile* bacteria with ridinilazole and assessed the number of resistant bacteria at the end of treatment. We repeated this process multiple times, with each cycle referred to as a serial passage. We observed that use of ridinilazole resulted in a low frequency of spontaneous mutation and no resistance after 14 serial passages of treatment. We have also evaluated ridinilazole mutant prevention concentration, or MPC, a measure evaluating the ability of an antibiotic to minimize the development of resistant organisms, against *C. difficile* clinical isolates. *In vitro* results show that ridinilazole has low MPC values against these isolates, providing further evidence supporting ridinilazole's profile for low resistance development.

## **Our Collaborations and Funding Arrangements**

### *University of Oxford*

In November 2013, we acquired all of the outstanding equity of MuOx Limited, or MuOx, a spin out of the University of Oxford founded by Professors Stephen Davies and Kay Davies. MuOx is our wholly-owned subsidiary. In connection with that acquisition, we and MuOx entered into a set of agreements with the University of Oxford and its technology transfer division, Isis Innovation Limited, or Isis, regarding the development of small molecule utrophin modulators. In November 2015, this set of agreements were extended through November 2019, with an option to extend for a further twelve months.

### *Research Sponsorship*

We have agreed to fund a drug research and discovery program in the University of Oxford laboratories to identify and research utrophin modulators to treat DMD. The University of Oxford is responsible for conducting this program. Isis has no obligations under the research sponsorship agreement. We refer to the agreement that governs our research sponsorship with the University of Oxford, which we, the University of Oxford and Isis entered into in November 2013, amended and restated in July 2014 and amended in November 2015, as the research sponsorship agreement. Under the research sponsorship agreement, we have agreed to fund up to £4.3 million over a six-year research period ending in November 2019. If we exercise our right to extend the research period by an additional year, we have agreed to fund an additional £0.8 million, for a total of £5.2 million. As of January 31, 2016, we had paid the University of Oxford £1.2 million of this amount.

The University of Oxford will own all intellectual property arising from the sponsored research, and we have agreed to assign to the University of Oxford any intellectual property arising from the sponsored research that either we or third parties whom we engage, may create, subject to our exercise of an option to obtain an exclusive license under the intellectual property arising from the sponsored research, as described below.

Either we or the University of Oxford would have the right to terminate the research sponsorship agreement for specified reasons, including the other party's insolvency or material breach, if the breach remains uncured for a specified period or is incurable, or our mutual determination, at specified times, that there are valid scientific reasons for terminating the project. The University of Oxford may also terminate the research sponsorship agreement if we default on more than one payment obligation and do not remedy the failure within a specified period after receiving notice. We may also terminate the research sponsorship agreement, after a specified period of time if any of the principal investigators is unable or unwilling to continue supervising the sponsored research and the successor proposed by the University of Oxford is not acceptable to us on reasonable and substantial grounds.

### *License of Know-How*

In November 2013, Isis executed a know-how license agreement with MuOx. We refer to the agreement, which was amended in July 2014, as the know-how license agreement. In the know-how license agreement, Isis granted MuOx a license under specified know-how, consisting of data and other information associated with specified utrophin modulators and biological screening technology, and all intellectual property rights pertaining

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## [Table of Contents](#)

to the specified know-how, to research, develop, make, have made, use, have used, import, have imported, export, have exported, and market the licensed know-how and products or processes resulting from the licensed know-how. We refer to the know-how specified in the know-how license agreement, as Oxford's background know-how. Our rights under Oxford's background know-how in the specified utrophin modulators are exclusive and sublicenseable. Our rights under Oxford's background know-how in the biological screening technology are initially exclusive, but become non-exclusive in November 2016, and are sublicenseable with Isis' consent, which may not be unreasonably withheld. Our rights are subject to the rights of the University of Oxford, the Muscular Dystrophy Association and the Muscular Dystrophy Campaign, and their respective employees, students and agents, to use and publish Oxford's background know-how for specified scholarly and academic research and teaching purposes. We have agreed to use commercially reasonable efforts to develop, exploit and market Oxford's background know-how or any compound deriving from Oxford's background know-how.

The know-how license agreement will remain in effect for at least three years with respect to the biological screening technology know-how, and otherwise, with respect to each of the compound or biological screening technology know-how, as long as we or our sublicensees are using commercially reasonable efforts to research and develop compounds derived from that know-how. Either we or Isis would have the right to terminate the know-how license agreement if the other party materially breaches the know-how license agreement and the breach remains uncured for a specified period or is incurable. We may terminate the know-how license agreement at our discretion by giving Isis six months' prior written notice. Isis may terminate the know-how license agreement on thirty days' notice if we fail to use commercially reasonable efforts to exploit Oxford's background know-how and do not remedy such breach within a specified time, or immediately, if we take specified actions relating to winding up or experience certain insolvency-related events.

### *Exclusive Option Rights*

We refer to the intellectual property rights arising under the research sponsorship agreement, or arising from research and development of small molecule utrophin modulation conducted by or under the supervision of certain University of Oxford scientists, that is created or reduced to practice after November 2013 and within a specified time after the expiration or termination of the research sponsorship agreement, as arising IP. Under an option agreement that we, the University of Oxford and Isis entered into in November 2013 and amended in November 2015, which we refer to, as amended, as the option agreement, Isis granted us an exclusive option to license the arising IP. We paid Isis £10,000 in connection with entering into the amendment to the option agreement. We may exercise the option within specified periods.

In connection with entering the initial option agreement, we paid Isis an option fee of a specified amount and issued to Isis warrants to purchase up to 354,090 of our ordinary shares at a purchase price of £0.20 per ordinary share. In connection with the November 2015 amendment, we extended the period during which Isis may exercise such options to February 2020. The warrants may be exercised based on the achievement of certain research, development and regulatory milestones. In November 2015, we announced the nomination of two series of new utrophin modulators for progression into lead optimization studies to achieve the first research milestone. This has entitled Isis to subscribe for 50,000 new ordinary one penny shares at an exercise price of 20 pence per share during the three month period starting November 22, 2016.

If we exercise our option to obtain a license under arising IP, we would be obligated to pay Isis up to a specified sum in option exercise fees, and Isis will use reasonable efforts to enter into a license agreement as quickly as possible, subject to Isis obtaining all necessary intellectual property assignments and conducting its internal due diligence procedures.

For any arising IP for which we have exercised the option and that comprises new chemical entities or compounds, which we refer to as optioned compounds, we would obtain an exclusive, sublicenseable license. We are obligated to pay milestone payments of up to £75,000 upon the achievement of specified development milestones, whether such milestones occur prior to or after our exercise of the option to obtain an exclusive

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## [Table of Contents](#)

sublicenseable license. Following exercise of such an option we would also be obligated to pay milestone payments upon the achievement of specified regulatory milestones with respect to each optioned compound. The specified regulatory milestone payment is due each time the specified regulatory milestone is achieved with respect to an optioned compound and, if each optioned compound achieved each regulatory milestone once, we would be obligated to pay Isis a total of £3.7 million in regulatory milestone payments for each optioned compound.

We would also be obligated to pay Isis a low single digit royalty of net sales by us, our affiliates or sublicensees of any product containing an optioned compound, which we refer to as a licensed product, subject to specified reductions. Our obligation to pay the royalty would expire on the later of the expiration of the last valid claim of any licensed patent or patent application claiming the licensed product or 20 years after the date on which we enter the license agreement. We would also be obligated to pay Isis a low single digit percentage of any payments we receive in connection with granting a sublicense under the licensed arising IP.

If we funded the development of the arising IP for the optioned compounds, through our funding under the research sponsorship agreement or by funding work at contract research organizations prior to the creation of the arising IP, then the milestone and royalty payments will be reduced to reflect the value that our funding delivered to the arising IP. We and Isis would negotiate such adjustment in good faith. If we and Isis are unable to agree, an expert will be appointed to make the determination.

For any arising IP for which we have exercised the option and that does not comprise new chemical entities or compound, which we call enabling IP, we would obtain an exclusive license, which we could sublicense with Isis' prior written consent, not to be unreasonably withheld, delayed or conditioned. We and Isis would negotiate the milestone payments and any other payments that we would be obligated to pay to Isis with respect to enabling IP. If we and Isis are unable to agree, an expert will be appointed to make the determination.

Any license granted to us under arising IP would be subject to the rights of the University of Oxford, and any person who at any time worked on the licensed arising IP, to use and publish the arising IP for specified scholarly and academic research and teaching purposes. We would also be obligated to use commercially reasonable efforts to develop, exploit and market the arising IP licensed to us.

The license agreement would remain in effect as long as we are using commercially reasonable efforts to develop and market the licensed products, unless terminated earlier by us or Isis, or extended by mutual agreement. Either we or Isis would be permitted to terminate the license agreement at any time if the other party materially breaches the license agreement and the breach remains uncured for a specified period or the breach is incurable. We would be permitted to terminate the license agreement for any reason after it has been in effect for three years upon giving six months' prior written notice. Isis would be permitted to terminate the license agreement if we challenge the validity of the licensed patents or patent applications or if we claim that we are no longer obligated to make payments to Isis under the license agreement because the know-how is unnecessary, or if we take specified actions relating to winding up or experience certain insolvency-related events. Upon termination of the license agreement, we would be obligated to grant Isis an irrevocable, transferable, non-exclusive license to develop, make, have made, use and market any improvements made by us during the option period, and related intellectual property rights, subject to the payment of a reasonable royalty.

The option agreement will remain in effect until a specified period of time, sufficient for us and Isis to enter into the license agreement, after our rights to exercise the options terminate, unless the option agreement is terminated earlier by either Isis and the University of Oxford, or us. Either we, or Isis and the University of Oxford, may terminate the option agreement at any time if the other materially breaches the option agreement and the breach remains uncured for a specified period or the breach is incurable, or if the other becomes insolvent. We may also terminate the option agreement, effective on each anniversary of the effective date of the option agreement, by giving 60 days' prior written notice to Isis and the University of Oxford.



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[Table of Contents](#)

***Wellcome Trust***

In October 2012, we entered into a translation award funding agreement with the Wellcome Trust Limited, as trustee of the Wellcome Trust, in order to support a Phase 1 and a Phase 2 clinical trial of ridinilazole for the treatment of CDI. We refer to the translation award funding agreement as the translation award agreement. Under the translation award agreement, we are eligible to receive up to £4.0 million from the Wellcome Trust, of which we have received £3.9 million. The translation award agreement followed a funding agreement we and the Wellcome Trust entered in October 2009, which we refer to as the discovery award agreement, under which we received £2.3 million for preclinical development of CDI antibiotics. We refer to any compound or product that is covered by intellectual property rights created under the discovery award agreement or the translation award agreement, or that is covered by intellectual property rights that we created or to which we had rights prior to October 2009 and that relate to the activities under the discovery award agreement or the translation award agreement, as the award products. We have agreed to use commercially reasonable efforts to achieve certain development milestones by specified dates.

*Development and Commercialization Obligations*

Under the translation award agreement, we may, subject to the Wellcome Trust's prior written consent, which will not be unreasonably withheld or delayed, conduct the development and commercialization of award products. We may conduct these activities, which we refer to as exploitation, ourselves or through our affiliates, licensees and third-party collaborators. We refer to any intellectual property rights associated with the exploitation as exploitation IP. The Wellcome Trust's consent is contingent on the establishment of a revenue sharing agreement that incorporates the financial terms of the translation award agreement. We are required to ensure that any results generated by a third party with whom we collaborate or subcontract will be deemed exploitation IP.

If we or our licensees do not develop or commercialize any exploitation IP in specified markets or specified indications within specified timeframes, the Wellcome Trust is permitted to conduct exploitation of the exploitation IP in those markets or indications. If the Wellcome Trust exercises its exploitation right, we would license or assign to it the appropriate exploitation IP and grant it non-exclusive, royalty-free licenses to our related background intellectual property, and we would be entitled to receive a portion of the net revenue received by the Wellcome Trust from exercise of its exploitation rights.

We may not allow a lien to be imposed on the exploitation IP or on any intellectual property rights licensed to us that we used for the clinical trials funded by the Wellcome Trust, except for certain liens arising in the ordinary course of business. We may also not make any material change to the general nature of our business without consent from the Wellcome Trust.

*Financial Terms*

We may draw down a final payment in a specified amount after completion of the Phase 2 clinical trial and the Wellcome Trust's receipt of an end of award report, in a form acceptable to the Wellcome Trust, detailing the work done and outcomes of the clinical trials.

Under the terms of the translation award agreement and the terms of the revenue sharing agreement we would enter into with the Wellcome Trust to permit our exploitation of the exploitation IP or award products, the Wellcome Trust is entitled to a share of the cumulative net revenue that we or our affiliates receive from exploiting the exploitation IP or award products. The Wellcome Trust would be eligible to receive a tiered portion of the net revenue, ranging from a mid-single digit percentage up to a mid-twenties percentage. Under the translation award agreement, if we, the Wellcome Trust or a third party contributes funding to further develop the exploitation IP or award products, we and the Wellcome Trust will negotiate in good faith modifications to the net revenue sharing percentage to reflect changes in our respective proportionate development costs for award products. If we and the Wellcome Trust are unable to agree, an expert will be appointed to make the

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## [Table of Contents](#)

determination. However, we agree not to accept funding to complete the Phase 2 clinical trial, without the Wellcome Trust's consent, if such funding would materially prejudice the Wellcome Trust's net revenue sharing or exploitation rights. In addition, we would be obligated to pay the Wellcome Trust a milestone in a specified amount if cumulative net revenue exceeds a specified amount.

The revenue sharing agreement would last until the latest of the expiration of the last patent or patent application covering any invention arising out of our activities under the research and clinical trials funded by the Wellcome Trust or the expiration of any agreement or payment obligations relating to exploitation of the intellectual property rights arising out of our activities under the research and clinical trials funded by the Wellcome Trust under the translation award agreement. Either we or the Wellcome Trust would have the right to terminate the revenue sharing agreement if the other party materially breaches the revenue sharing agreement and the breach remains uncured for a specified period or the breach is incurable, if the other party experiences specified insolvency related events, or if the translation award agreement expires or is terminated.

If we are obligated to withhold tax on the amounts payable to the Wellcome Trust, we agree to pay the Wellcome Trust a greater amount, such that the Wellcome Trust receives the same amount after the withholding as it would have received without such deduction.

We would be required to make a full or partial repayment to the Wellcome Trust of the funding we received under the translation award agreement, plus accrued interest, under specified conditions, including our unauthorized use of the award amount, our fraudulent or willful misconduct, our knowingly withholding material information from the Wellcome Trust, or an acquisition by certain third parties of all or a material part of our business or assets or of a majority of our equity. Upon such a full repayment, our obligation to share a portion of net revenue with the Wellcome Trust would terminate.

### *Termination*

Unless earlier terminated by the Wellcome Trust, the translation award agreement will terminate on the earlier of our full repayment of the award amount, plus accrued interest, to the Wellcome Trust following its request for repayment, or the expiration of all payment obligations under the translation award agreement and the revenue sharing agreement. The Wellcome Trust may terminate the translation award agreement for specified reasons, including our material breach or insolvency related events or the Wellcome Trust's determination that the clinical trials should be terminated due to a serious failure in the progress, management or conduct of the clinical trials, if we do not remedy such condition within a specified period after receiving notice.

### *Assignment*

We may not, without the Wellcome Trust's prior consent, assign, transfer or declare a trust over the translation award agreement or otherwise dispose of any of our rights or obligations under the translation award agreement, with such consent not being unreasonably withheld, delayed or conditioned, other than an assignment to our affiliates.

### ***Muscular Dystrophy Association***

In December 2011, we entered into a grant agreement with the Muscular Dystrophy Association, Inc., or MDA, a not for profit corporation based in New York, in order to partially fund a Phase 1 clinical trial of ezutromid to treat DMD. We refer to this grant agreement with MDA as the MDA grant agreement. To date, we have received the entire amount of MDA's grant to us, or an aggregate of \$750,000.

### *Financial Terms*

We refer to small molecules that can upregulate the utrophin gene, including ezutromid and compounds with similar mechanisms of action to which we have rights, as project compounds. Under the MDA grant

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## [Table of Contents](#)

agreement, we have agreed to make specified milestone payments to MDA during our or our affiliates' development and commercialization of pharmaceutical products containing the project compounds, which we refer to as project products. Because we raised more than a specified aggregate amount of funding, we have paid a specified sum to MDA under the terms of the agreement, which we refer to as the MDA cash infusion milestone payment.

We have also agreed to pay MDA a specified lump sum amount, less any previously paid MDA cash infusion milestone payment, following the regulatory approval of any project product for use or sale in the United States or European Union in the treatment of DMD or Becker muscular dystrophy, or BMD, and an additional specified sum upon achievement of a commercial milestone. We would be obligated to pay MDA a low single digit percentage royalty of worldwide net sales by us, our affiliates or licensees of any project product. If we assign our rights to any of the project compounds or experience specified change in control events, MDA may require our assignee to assume our obligations under the MDA grant agreement with respect to the assigned rights, or require us to pay MDA the greater of a low single digit percentage of the fair market value of the assigned rights, or an amount that would give MDA an internal rate of return of a low double digit percentage on its grant to us.

### *Interruption License*

Upon the occurrence of specified events, which we refer to as interruptions, we have agreed to refund to MDA the entire grant amount of \$750,000 plus a low double digit interest on that amount, subject to specified exemptions. An interruption may occur if we or our affiliates cease reasonable research, development and commercialization of project products and cease using diligent efforts to obtain a third party development and commercialization partner, which require our annual expenditure of a minimum specified amount on such efforts for longer than a specified period. Interruptions may also occur if we license the rights to develop and commercialize project products to a third party without retaining a right of reversion, and such partner ceases reasonable development and commercialization of project products for longer than a specified period or ceases to sell project products in the United States or European Union, or if we, upon the reversion of such rights from a third party commercialization partner to us, fail to use reasonable efforts to develop and commercialize project products and cease using diligent efforts to obtain a third party development and commercialization partner, or, within a specified period from the date of reversion, to license the development and commercialization activities of project products to a third party. In all such cases, we are exempt from interruption payments in the event of specified scientific failures, including if we fail to achieve primary endpoints for any clinical trial of ezutromid, if the project compounds are unfit for administration to humans or if we cannot develop a commercial manufacturing process.

We have granted to MDA, effective on the occurrence of such an interruption, an exclusive, sublicenseable, worldwide, perpetual, irrevocable and royalty-free license under the patent rights, know-how and intellectual property that we control, useful for the project compounds or project products, to research, develop, manufacture, have manufactured, use, sell, offer to sell, import and export the project compounds and project products for the prevention, treatment, or amelioration of DMD or BMD. We refer to such license as the interruption license. Upon the effectiveness of the interruption license, we would be obligated to assign to MDA or its designee the regulatory filings, regulatory approvals, and contract rights that we or our affiliates own, and deliver specified know-how, in each case, relating to project compounds and project products.

MDA acknowledges that if a royalty or other payment is due to any third party from whom we licensed or acquired the intellectual property licensed to MDA, the interruption license is contingent on MDA or its sublicensee assuming those obligations resulting from their exercise of the interruption license.

### *Termination*

The MDA grant agreement will continue indefinitely.

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## [Table of Contents](#)

### ***Duchenne Partners Fund***

In December 2011, we entered into a grant agreement with the Duchenne Partners Fund, Inc., or DPF, a Delaware limited liability company, in order to partially fund a Phase 1 clinical trial of ezutromid to treat DMD. We refer to this grant agreement with DPF as the DPF grant agreement. To date, we have received the entire amount of DPF's grant to us, or an aggregate of \$500,000.

### ***Financial Terms***

We refer to small molecules that can upregulate the utrophin gene, including ezutromid and compounds with similar mechanisms of action to which we have rights, as project compounds. Under the DPF grant agreement, we have agreed to make specified milestone payments to DPF during our or our affiliates' development and commercialization of pharmaceutical products containing the project compounds, which we refer to as project products. Because we raised more than a specified aggregate amount of funding, we have paid a specified sum to DPF under the terms of the agreement, which we refer to as the DPF cash infusion milestone payment.

We have also agreed to pay DPF a specified lump sum amount, less any previously paid DPF cash infusion milestone payment, following the regulatory approval of any project product for use or sale in the United States or European Union in the treatment of DMD or BMD and an additional specified sum upon achievement of a commercial milestone. We would be obligated to pay DPF a low single digit percentage royalty of worldwide net sales by us, our affiliates or licensees of any project product. If we assign our rights to any of the project compounds or experience specified change in control events, DPF may require our assignee to assume our obligations under the DPF grant agreement with respect to the assigned rights, or require us to pay DPF the greater of a low single digit percentage of the fair market value of the assigned rights, or an amount that would give DPF an internal rate of return of a low double digit percentage on its grant to us.

### ***Termination***

The DPF grant agreement will continue indefinitely.

### **Competition**

The biotechnology and pharmaceutical industries are characterized by rapidly advancing technologies, intense competition and a strong emphasis on proprietary products. While we believe that our technologies, knowledge, experience and scientific resources provide us with competitive advantages, we face potential competition from many different sources, including major pharmaceutical, specialty pharmaceutical and biotechnology companies, academic institutions, government agencies and private and public research institutions. Any product candidates that we successfully develop and commercialize will compete with existing therapies and new therapies that may become available in the future.

Many of our competitors may have significantly greater financial resources and expertise in research and development, manufacturing, preclinical testing, conducting clinical trials, obtaining regulatory approvals and marketing approved products than we do. These competitors also compete with us in recruiting and retaining qualified scientific and management personnel and establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs. Smaller or early stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies.

Our commercial opportunity could be reduced or eliminated if our competitors develop and commercialize products that are safer, more effective, have fewer or less severe side effects, are more convenient or are less expensive than any products that we may develop. Our competitors also may obtain marketing approvals for their

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## [Table of Contents](#)

products more rapidly than we obtain approval for ours. In addition, our ability to compete may be affected because in some cases insurers or other third-party payors seek to encourage the use of generic products. This may have the effect of making branded products less attractive, from a cost perspective, to buyers.

The key competitive factors affecting the success of our product candidates are likely to be their efficacy, safety, convenience, price and the availability of coverage and reimbursement from government and other third-party payors.

The competition for ezutromid and ridinilazole includes the following:

### *Ezutromid*

There is currently no approved therapy for the treatment of DMD applicable to all DMD patients that seeks to alter the progression of the disease. Corticosteroids, such as prednisolone and deflazacort, are the current standard of care for DMD patients, although these are symptomatic treatments that do not address the underlying cause of DMD, and their use can be associated with severe side effects and concerns over weight gain. Other companies are developing alternative therapeutic approaches to the treatment of DMD, a number of which are outlined below.

*Nonsense mutations.* PTC Therapeutics, Inc., or PTC, is developing ataluren (Translarna™). Ataluren is a small molecule that enables formation of functional dystrophin in DMD patients with nonsense mutations. DMD caused by nonsense mutations affects approximately 13% of all DMD patients. The European Commission has granted conditional approval for ataluren in Europe, and PTC is commercializing ataluren in several European countries. In October 2015, PTC announced a Phase 3 confirmatory clinical trial of ataluren did not achieve its primary endpoint, and in February 2016, PTC announced its receipt of a “refuse to file” letter from the FDA indicating that PTC’s New Drug Application for ataluren was not sufficiently complete to permit a substantive review.

*Exon Skipping.* BioMarin Pharmaceutical Inc., or BioMarin, following the acquisition of Prosensa Holding N.V. that was completed in 2015, and Sarepta Therapeutics, Inc., or Sarepta, are developing treatments for DMD based on exon-skipping approaches. Exons are organic molecules known as nucleotides within the DNA strand that the cellular machinery translates to make full-length, functional protein. In a sub-population of DMD patients, synthesis of the dystrophin protein is disrupted because of mutations that may be due, among other things, to deleted exons. Exon-skipping technology seeks to allow the production of a shorter but still functional dystrophin protein. BioMarin’s most advanced exon-skipping drug is drisapersen (Kyndrisa™). BioMarin completed a rolling NDA submission for drisapersen to the FDA seeking accelerated approval in April 2015. In January 2016, the FDA issued to BioMarin a “complete response” letter to the NDA for drisapersen which indicated that the review cycle for the application was complete and that the application was not ready for approval in its present form due to the standard of substantial evidence of effectiveness having not been met. BioMarin submitted a Marketing Authorization Application, or MAA, to the European Medicines Agency, or EMA, for drisapersen, which was validated in June 2015 and remains under review. Drisapersen targets exon 51 and would be applicable to approximately 13% of all DMD patients. Sarepta’s most advanced product candidate is eteplirsen (Exondys 51™). Sarepta filed its NDA for eteplirsen with the FDA in August 2015, which was reviewed by the FDA in April 2016. Eteplirsen also targets exon 51 and would therefore be applicable to approximately 13% of all DMD patients. BioMarin and Sarepta are also developing other exon-skipping therapies to treat other genetic mutations. These companies have product candidates in clinical trials that are targeting exon 44, which is applicable to 6% of all DMD patients, exon 45, which is applicable to 8% of all DMD patients, and exon 53, which is applicable to 6% of all DMD patients. According to an article published in 2009 in the peer reviewed journal *Human Mutation*, skipping of the ten most common exons would treat in the aggregate approximately 41% of all DMD patients. We believe that there are exon-skipping therapies currently in clinical development to address four of these exons and that skipping of these exons would treat in the aggregate less than one-third of all DMD patients.

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## [Table of Contents](#)

*Other DMD approaches.* A number of other companies are pursuing alternative therapeutic approaches for the treatment of DMD. Tivorsan Pharmaceuticals is developing a recombinant form of biglycan, a protein that is naturally produced in the body and regulates production of utrophin in developing muscle, which is currently in preclinical development. Askelepios Biopharmaceuticals, Inc. is developing biostrophin, a gene therapy approach that is currently in Phase 1 clinical development. Pfizer, Inc., or Pfizer, and Bristol-Myers Squibb Company, or BMS, are pursuing an approach based on muscle tissue growth through myostatin inhibition. Pfizer is developing the myostatin inhibitor PF-06252616 and initiated a Phase 2 clinical trial in patients with DMD in December 2014. BMS is developing BMS-986089, a myostatin inhibitor that is currently in Phase 1 clinical development. Santhera Pharmaceuticals Holding AG completed a Phase 3 clinical trial of its product candidate, idebenone, in 2014 and reported that idebenone (Raxone®/Catena®) delayed deterioration in respiratory function. Catabasis Pharmaceuticals, Inc. is developing CAT-1004 as a non-steroidal, anti-inflammatory drug that is currently in a Phase 1/2 clinical trial. Akashi Therapeutics is developing HT-100, an anti-inflammatory and anti-fibrotic small molecule that aims to reduce fibrosis and inflammation. In February 2016, Akashi Therapeutics announced that dosing and enrollment into a Phase 1b/2a clinical trial of HT-100 was suspended due to a fatality in the trial.

### **Ridinilazole**

Several pharmaceutical and biotechnology companies have established themselves in the market for the treatment of CDI, and several additional companies are developing products for the treatment of CDI. We expect that these products will compete with ridinilazole.

*Antibiotics.* The current standard of care for CDI is treatment with the broad spectrum antibiotics vancomycin and metronidazole, both of which are available in generic form in the United States. Generic antibiotic therapies typically are sold at lower prices than branded antibiotics and generally are preferred by managed care providers of health services. The antibiotic fidaxomicin (Dificid™ in the United States, Dificlir™ in Europe) was recently approved for the treatment of CDI in the United States and the European Union. Fidaxomicin was originally developed by Optimer Pharmaceuticals, Inc., which was later acquired by Cubist Pharmaceuticals, Inc., or Cubist. Cubist was recently acquired by Merck & Co., Inc., or Merck. Other antibiotics in late-stage clinical trials for treatment of CDI include cadazolid, which is being developed by Actelion Pharmaceuticals Limited and is currently in Phase 3 clinical development and surotomycin, which was originally developed by Cubist, and later acquired by Merck. Merck reported that it had received unfavorable efficacy data from a Phase 3 clinical trial for surotomycin in August 2015.

*Other CDI approaches.* A number of other approaches for the treatment of CDI are in development. Merck is developing the monoclonal antibodies bezlotoxumab, which completed Phase 3 clinical trials in 2015. In January 2016 the FDA accepted for review the Biologics License Application, or BLA, for bezlotoxumab and granted a “priority review.” Merck has also filed a MAA with EMA. This antibody neutralizes certain toxins that are produced by *C. difficile* bacteria and would be an adjunctive therapy to antibiotics. Sanofi Pasteur is developing the vaccine ACAM-CDIFF for primary prevention of CDI. ACAM-CDIFF is likely to be used only in high-risk patients given the difficulty of administering a vaccine to a broad population. Fecal biotherapy aims to recolonize the bacteria that comprise the natural gut flora and would also be adjunctive therapy to antibiotics. Fecal biotherapy approaches in development include SER-109, which is being developed by Seres Therapeutics, Inc., formerly Seres Health, Inc. and which recently initiated a Phase 2 trial to assess safety and efficacy, and RBX2660, which is being developed by Rebiotix, Inc. and is currently being evaluated in a Phase 2 clinical trial.

### **Manufacturing**

We do not own or operate, and currently have no plans to establish, manufacturing facilities for the production of clinical or commercial quantities of ezutromid, ridinilazole or for the other compounds that we are evaluating in our DMD program. We currently rely, and expect to continue to rely, on third parties for the manufacture of our product candidates and any products that we may develop.

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## [Table of Contents](#)

We currently engage a single, third-party manufacturer to provide clinical material of the active pharmaceutical ingredient, or API, and fill and finish services for the final drug product formulation of ezutromid that is being used in our clinical trials. A second third-party clinical supplier is responsible for the labelling and shipping of the final drug product to the clinical trial sites. We are engaged with a different drug product supplier to provide final drug product of the optimized formulation of ezutromid that is being evaluated in our ongoing Phase 1 clinical trial. For ridinilazole, we engaged with two other third-party manufacturers to provide clinical material of the API and fill and finish services to supply final drug product that is used in our ongoing Phase 2 clinical trial. A third supplier is engaged to provide packaging, labelling and distribution services for the ongoing Phase 2 clinical trial. We obtain the supplies of our API and drug products from these manufacturers pursuant to agreements that include specific supply timelines and volume expectations.

We obtain the supplies of our product candidates from these manufacturers under master services contracts and specific work orders. However, we do not have long-term supply arrangements in place. We do not currently have arrangements in place for redundant supply or a second source for API for ezutromid. If any of our current manufacturers should become unavailable to us for any reason, we believe that there are a number of potential replacements, although we might incur some delay in identifying and qualifying such replacements. We have recently engaged two new third-party manufacturers to supply the API of ridinilazole and fill and finish services to supply final drug product for use in future clinical trials. We believe these suppliers are suitable for commercial manufacture. We are considering appropriate third-party vendors for clinical packaging, labelling and distribution of the finalized drug product.

All of our product candidates are organic compounds of low molecular weight and are referred to as small molecules. We have selected these compounds based on their potential efficacy and safety, although they are also associated with reasonable cost of goods, ready availability of starting materials and ease of synthesis. We believe that the chemistry for ezutromid and ridinilazole is amenable to scale-up and does not currently require unusual equipment in the manufacturing process. We expect to continue to develop product candidates that can be produced cost-effectively at contract manufacturing facilities.

### **Intellectual Property**

Our success depends in large part on our ability to obtain and maintain proprietary protection for our product candidates, technology and know-how, to operate without infringing the proprietary rights of others and to prevent others from infringing our proprietary rights. We strive to protect the proprietary technology that we believe is important to our business by, among other methods, seeking and maintaining patents, where available, that are intended to cover our product candidates, compositions and formulations, their methods of use and processes for their manufacture and any other inventions that are commercially important to the development of our business. We also rely on trade secrets, know-how, continuing technological innovation and in-licensing opportunities to develop and maintain our proprietary and competitive position.

As of April 20, 2016, we owned or exclusively licensed a total of nine U.S. patents, five U.S. patent applications, five European patents and six European patent applications, including original filings, continuations and divisional applications, as well as numerous other foreign counterparts to these U.S. and European patents and patent applications.

Our DMD patent portfolio includes the following granted patents and patent applications that we own or exclusively license:

- two granted U.S. patents covering the composition of matter of ezutromid and combinations of ezutromid with ancillary therapeutic agents, which are scheduled to expire in 2029 and 2030, respectively;
- a granted U.S. patent covering methods of manufacture of ezutromid, which is scheduled to expire in 2029;
- a pending U.S. patent application covering methods of use and the composition of matter of second generation utrophin modulator candidates, which if granted would be scheduled to expire in 2027 (subject to possible patent term adjustment, or PTA);

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## [Table of Contents](#)

- a granted European patent covering the composition of matter of ezutromid that cleared the opposition period in April 2015 with no opposition filed against it at the European Patent Office, and which is scheduled to expire in 2027; and
- a number of pending patent applications covering formulations of ezutromid, further methods of use of ezutromid and the composition of matter of second generation utrophin modulator candidates.

Our CDI patent portfolio includes the following granted patents and patent applications that we own or exclusively license:

- a granted U.S. patent covering the use of ridinilazole in the treatment of CDI, which is scheduled to expire in 2029 (subject to possible PTA);
- a corresponding granted European patent covering the use of ridinilazole in the treatment of CDI, which is scheduled to expire in 2029;
- a granted U.S. patent covering hydrates of ridinilazole, which is scheduled to expire in 2029;
- an allowed European divisional application covering hydrates of ridinilazole and pharmaceutical compositions comprising ridinilazole;
- a further pending divisional application with the European Patent Office; and
- two granted U.S. patents, a pending U.S. continuation patent application and a granted European patent covering second generation agents for the treatment of CDI, which is scheduled to expire in 2031.

While patent protection is not available for composition of matter claims that only recite the API for ridinilazole, protection may be available for the pharmaceutical compositions comprising ridinilazole as well other forms thereof such as hydrates (and indeed claims have been secured for the latter in both Europe and the U.S.).

The term of individual patents depends upon the legal term for patents in the countries in which they are obtained. In most countries, including the United States, the patent term is 20 years from the filing date of a non-provisional patent application. In the United States, a patent's term may, in certain cases, be lengthened by patent term adjustment, which compensates a patentee for administrative delays by the U.S. Patent and Trademark Office, or the USPTO, in examining and granting a patent, or may be shortened if a patent is terminally disclaimed over an earlier filed patent.

The term of a U.S. patent that covers a drug, biological product or medical device approved pursuant to a pre-market approval, or PMA, may also be eligible for patent term extension when FDA approval is granted, provided that certain statutory and regulatory requirements are met. The length of the patent term extension is related to the length of time the drug is under regulatory review while the patent is in force. The Drug Price Competition and Patent Term Restoration Act of 1984, or the Hatch-Waxman Act, permits a patent term extension of up to five years beyond the expiration date set for the patent. Patent extension cannot extend the remaining term of a patent beyond a total of 14 years from the date of product approval, only one patent applicable to each regulatory review period may be granted an extension and only those claims reading on the approved drug may be extended. Similar provisions are available in Europe and certain other foreign jurisdictions to extend the term of a patent that covers an approved drug, provided that statutory and regulatory requirements are met. Thus, in the future, if and when our product candidates receive approval by the FDA or foreign regulatory authorities, we expect to apply for patent term extensions on issued patents covering those products, depending upon the length of the clinical trials for each drug and other factors. The expiration dates of our patents and patent applications referred to above are without regard to potential patent term extension or other market exclusivity that may be available to us.

In addition to patents, we may rely, in some circumstances, on trade secrets to protect our technology and maintain our competitive position. However, trade secrets can be difficult to protect. We seek to protect our



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## [Table of Contents](#)

proprietary technology and processes, in part, by confidentiality agreements with our employees, corporate and scientific collaborators, consultants, scientific advisors, contractors and other third parties. We also seek to preserve the integrity and confidentiality of our data and trade secrets by maintaining physical security of our premises and physical and electronic security of our information technology systems.

### **Sales and Marketing**

In light of our stage of development, we have not yet established a sales and marketing organization or distribution capabilities. We have retained exclusive worldwide commercialization rights for ezutromid and ridinilazole for all indications in all territories.

If ezutromid receives marketing approval, we intend to commercialize it initially in the United States and Europe with our own focused, specialized sales force that we plan to establish. We believe that medical specialists treating DMD are sufficiently concentrated that we will be able to effectively promote ezutromid with a targeted sales team in these and potentially other key territories. We also believe that our relationships with patient advocacy groups will strengthen our ability to market ezutromid. Outside of the United States and Europe, we plan to evaluate the potential for utilizing collaboration, distribution and other marketing arrangements with third parties to commercialize ezutromid.

We plan to evaluate our options for maximizing the commercial opportunity for ridinilazole. We may determine to commercialize the product directly in the United States and Europe with our own specialized sales force or seek third-party collaborators for the commercialization of ridinilazole. We intend to evaluate the relative merits of retaining commercialization rights for ourselves or entering into collaboration arrangements with third parties depending on factors such as the anticipated development costs required to achieve marketing approval, the sales and marketing resources required in each territory in which we receive approval, the relative size of the market opportunity in such territory, the particular expertise of the third party and the proposed financial terms of the arrangement.

We also plan to build key capabilities, such as marketing, market access, sales management and medical affairs, to implement marketing and medical strategies for any products that we market through our own sales organization and to oversee and support our sales force. The responsibilities of the marketing organization would include developing educational initiatives with respect to approved products and expanding relationships with thought leaders in relevant fields of medicine.

### **Government Regulation**

Government authorities in the United States, at the federal, state and local level, and in other countries and jurisdictions, including the European Union, extensively regulate, among other things, the research, development, testing, manufacture, quality control, approval, packaging, storage, recordkeeping, labeling, advertising, promotion, distribution, marketing, post-approval monitoring and reporting, and import and export of pharmaceutical products. The processes for obtaining regulatory approvals in the United States and in foreign countries and jurisdictions, along with subsequent compliance with applicable statutes and regulations and other regulatory authorities, require the expenditure of substantial time and financial resources.

### ***Review and Approval of Drugs in the United States***

In the United States, the FDA regulates drugs under the Federal Food, Drug, and Cosmetic Act, or FDCA, and implementing regulations. The failure to comply with the FDCA and applicable U.S. requirements at any time during the product development process, approval process or after approval may subject an applicant or sponsor to a variety of administrative or judicial sanctions, including refusal by the FDA to approve pending applications, withdrawal of an approval, imposition of a clinical hold, issuance of warning letters and other types

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## [Table of Contents](#)

of letters, product recalls, product seizures, total or partial suspension of production or distribution, injunctions, fines, refusals of government contracts, restitution, disgorgement of profits, or civil or criminal investigations and penalties brought by the FDA and the Department of Justice, or DOJ, or other federal and state governmental entities.

An applicant seeking approval to market and distribute a new drug product in the United States must typically undertake the following:

- completion of preclinical laboratory tests, animal studies and formulation studies in compliance with the FDA's good laboratory practice, or GLP, regulations;
- submission to the FDA of an IND, which must take effect before human clinical trials may begin;
- approval by an independent institutional review board, or IRB, representing each clinical site before each clinical trial may be initiated;
- performance of adequate and well-controlled human clinical trials in accordance with current good clinical practices, or GCP, to establish the safety and efficacy of the proposed drug product for each indication;
- preparation and submission to the FDA of a new drug application, or NDA;
- review of the product candidate by an FDA advisory committee, where appropriate or if applicable;
- satisfactory completion of one or more FDA inspections of the manufacturing facility or facilities at which the product, or components thereof, are produced to assess compliance with current Good Manufacturing Practices, or cGMP, requirements and to assure that the facilities, methods and controls are adequate to preserve the product's identity, strength, quality and purity;
- satisfactory completion of FDA audits of clinical trial sites to assure compliance with GCPs and the integrity of the clinical data;
- payment of user fees and securing FDA approval of the NDA; and
- compliance with any post-approval requirements, including Risk Evaluation and Mitigation Strategies, or REMS, where applicable, and any post-approval studies required by the FDA.

### ***Preclinical Studies***

Preclinical studies include laboratory evaluation of the purity and stability of the manufactured drug substance or API and the formulated drug or drug product, as well as *in vitro* and animal studies to assess the safety and activity of the drug for initial testing in humans and to establish a rationale for therapeutic use. The conduct of preclinical studies is subject to federal regulations and requirements, including GLP regulations. The results of the preclinical tests, together with manufacturing information, analytical data, any available clinical data or literature and plans for clinical trials, among other things, are submitted to the FDA as part of an IND. Some long-term preclinical testing, such as animal tests of reproductive adverse events and carcinogenicity, may continue after the IND is submitted.

### ***IND and IRB Approval of Human Clinical Trials in Support of an NDA***

Clinical trials involve the administration of the investigational product to human subjects under the supervision of qualified investigators in accordance with GCP requirements, which include, among other things, the requirement that all research subjects provide their informed consent in writing before their participation in any clinical trial. Clinical trials are conducted under written study protocols detailing, among other things, the inclusion and exclusion criteria, the objectives of the study, the parameters to be used in monitoring safety and the effectiveness criteria to be evaluated. A protocol for each clinical trial and any subsequent protocol amendments must be submitted to the FDA as part of the IND. An IND automatically becomes effective 30 days

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## [Table of Contents](#)

after receipt by the FDA, unless before that time the FDA raises concerns or questions related to a proposed clinical trial and places the clinical trial on clinical hold. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before the clinical trial can begin. Accordingly, submission of an IND may or may not result in the FDA allowing clinical trials to commence.

In addition to the foregoing IND requirements, an IRB representing each institution participating in the clinical trial must review and approve the plan for any clinical trial before it commences at that institution, and the IRB must conduct a continuing review and reapprove the study at least annually. The IRB must review and approve, among other things, the study protocol and informed consent information to be provided to study subjects. An IRB must operate in compliance with FDA regulations. Information about certain clinical trials must be submitted within specific timeframes to the National Institutes of Health for public dissemination on its ClinicalTrials.gov website.

A sponsor who wishes to conduct a clinical trial outside the United States may, but need not, obtain FDA authorization to conduct the clinical trial under an IND. If a foreign clinical trial is not conducted under an IND, the sponsor may submit data from the clinical trial to the FDA in support of an NDA or IND so long as the clinical trial is conducted in compliance with an international guideline for the ethical conduct of clinical research known as the Declaration of Helsinki or the laws and regulations of the country or countries in which the clinical trial is performed, whichever provides the greater protection to the participants in the clinical trial.

Human clinical trials are typically conducted in four sequential phases, which may overlap or be combined:

- **Phase 1.** The drug is initially introduced into healthy human subjects or, in certain indications such as cancer, patients with the target disease or condition and tested for safety, dosage tolerance, absorption, metabolism, distribution, excretion and, if possible, to gain an early indication of its effectiveness and to determine optimal dosage.
- **Phase 2.** The drug is administered to a limited patient population to identify possible adverse effects and safety risks, to preliminarily evaluate the efficacy of the product for specific targeted diseases and to determine dosage tolerance and optimal dosage.
- **Phase 3.** The drug is administered to an expanded patient population, generally at geographically dispersed clinical trial sites, in well-controlled clinical trials to generate enough data to statistically evaluate the efficacy and safety of the product for approval, to establish the overall risk-benefit profile of the product, and to provide adequate information for the labeling of the product. Phase 3 clinical trials are commonly referred to as “pivotal” trials, which typically denotes a trial which presents the data that the FDA or other relevant regulatory agency will use to determine whether or not to approve a drug.
- **Phase 4.** Post-approval studies may be conducted after initial marketing approval. These studies are used to gain additional experience from the treatment of patients in the intended therapeutic indication.

Progress reports detailing the results of the clinical trials must be submitted at least annually to the FDA and more frequently if serious adverse events occur. In addition, IND safety reports must be submitted to the FDA for any of the following: serious and unexpected suspected adverse reactions; findings from other studies or animal or *in vitro* testing that suggest a significant risk in humans exposed to the drug; and any clinically important increase in the case of a serious suspected adverse reaction over that listed in the protocol or investigator brochure. Phase 1, Phase 2 and Phase 3 clinical trials may not be completed successfully within any specified period, or at all. Furthermore, the FDA or the sponsor or the data monitoring committee may suspend or terminate a clinical trial at any time on various grounds, including a finding that the research subjects are being exposed to an unacceptable health risk. Similarly, an IRB can suspend or terminate approval of a clinical trial at its institution, or an institution it represents, if the clinical trial is not being conducted in accordance with the IRB’s requirements or if the drug has been associated with unexpected serious harm to patients. The FDA will typically inspect one or more clinical sites to assure compliance with GCP and the integrity of the clinical data submitted.

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## [Table of Contents](#)

### *Submission of an NDA to the FDA*

Assuming successful completion of required clinical testing and other requirements, the results of the preclinical studies and clinical trials, together with detailed information relating to the product's chemistry, manufacture, controls and proposed labeling, among other things, are submitted to the FDA as part of an NDA requesting approval to market the drug product for one or more indications. Under federal law, the submission of most NDAs is additionally subject to an application user fee, currently exceeding \$2.3 million, and the sponsor of an approved NDA is also subject to annual product and establishment user fees, currently exceeding \$114,000 per product and \$585,000 per establishment. These fees are typically increased annually. Certain exceptions and waivers are available for some of these fees, such as an exception from the application fee for drugs with orphan designation and a waiver for certain small businesses and an exception from the establishment fee when the establishment does not engage in manufacturing the drug during a particular fiscal year.

The FDA conducts a preliminary review of an NDA within 60 calendar days of its receipt and strives to inform the sponsor by the 74<sup>th</sup> day after the FDA's receipt of the submission whether the application is sufficiently complete to permit substantive review. The FDA may request additional information rather than accept an NDA for filing. In this event, the application must be resubmitted with the additional information. The resubmitted application is also subject to review before the FDA accepts it for filing. Once the submission is accepted for filing, the FDA begins an in-depth substantive review.

The FDA has agreed to specified performance goals in the review process of NDAs. Under that agreement, 90% of applications seeking approval of New Molecular Entities, or NMEs, are meant to be reviewed within ten months from the date on which FDA accepts the NDA for filing, and 90% of applications for NMEs that have been designated for "priority review" are meant to be reviewed within six months of the filing date. For applications seeking approval of drugs that are not NMEs, the ten-month and six-month review periods run from the date that FDA receives the application. The review process may be extended by the FDA for three additional months to consider new information or clarification provided by the applicant to address an outstanding deficiency identified by the FDA following the original submission.

Before approving an NDA, the FDA typically will inspect the facility or facilities where the product is or will be manufactured. These pre-approval inspections cover all facilities associated with an NDA submission, including drug component manufacturing (such as active pharmaceutical ingredients), finished drug product manufacturing, and control testing laboratories. The FDA will not approve an application unless it determines that the manufacturing processes and facilities are in compliance with cGMP requirements and adequate to assure consistent production of the product within required specifications. Additionally, before approving an NDA, the FDA will typically inspect one or more clinical sites to assure compliance with GCP.

In addition, as a condition of approval, the FDA may require an applicant to develop a REMS. REMS use risk minimization strategies beyond the professional labeling to ensure that the benefits of the product outweigh the potential risks. To determine whether a REMS is needed, the FDA will consider the size of the population likely to use the product, seriousness of the disease, expected benefit of the product, expected duration of treatment, seriousness of known or potential adverse events, and whether the product is a new molecular entity. REMS can include medication guides, physician communication plans for healthcare professionals, and elements to assure safe use, or ETASU. ETASU may include, but are not limited to, special training or certification for prescribing or dispensing, dispensing only under certain circumstances, special monitoring, and the use of patient registries. The FDA may require a REMS before approval or post-approval if it becomes aware of a serious risk associated with use of the product. The requirement for a REMS can materially affect the potential market and profitability of a product.

The FDA is required to refer an application for a novel drug to an advisory committee or explain why such referral was not made. Typically, an advisory committee is a panel of independent experts, including clinicians and other scientific experts, that reviews, evaluates and provides a recommendation as to whether the application should be approved and under what conditions. The FDA is not bound by the recommendations of an advisory committee, but it considers such recommendations carefully when making decisions.

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## [Table of Contents](#)

### *Fast Track, Breakthrough Therapy and Priority Review Designations*

The FDA is authorized to designate certain products for expedited review if they are intended to address an unmet medical need in the treatment of a serious or life-threatening disease or condition. These programs are fast track designation, breakthrough therapy designation and priority review designation.

Specifically, the FDA may designate a product for fast track review if it is intended, whether alone or in combination with one or more other drugs, for the treatment of a serious or life-threatening disease or condition, and it demonstrates the potential to address unmet medical needs for such a disease or condition. For fast track products, sponsors may have greater interactions with the FDA and the FDA may initiate review of sections of a fast track product's NDA before the application is complete. This rolling review may be available if the FDA determines, after preliminary evaluation of clinical data submitted by the sponsor, that a fast track product may be effective. The sponsor must also provide, and the FDA must approve, a schedule for the submission of the remaining information and the sponsor must pay applicable user fees. However, the FDA's time period goal for reviewing a fast track application does not begin until the last section of the NDA is submitted. In addition, the fast track designation may be withdrawn by the FDA if the FDA believes that the designation is no longer supported by data emerging in the clinical trial process.

In 2012, Congress enacted the Food and Drug Administration Safety and Innovation Act, or FDASIA. This law established a new regulatory scheme allowing for expedited review of products designated as "breakthrough therapies." A product may be designated as a breakthrough therapy if it is intended, either alone or in combination with one or more other drugs, to treat a serious or life-threatening disease or condition and preliminary clinical evidence indicates that the product may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. The FDA may take certain actions with respect to breakthrough therapies, including holding meetings with the sponsor throughout the development process; providing timely advice to the product sponsor regarding development and approval; involving more senior staff in the review process; assigning a cross-disciplinary project lead for the review team; and taking other steps to design the clinical trials in an efficient manner.

The FDA may designate a product for priority review if it is a drug that treats a serious condition and, if approved, would provide a significant improvement in safety or effectiveness. The FDA determines, on a case-by-case basis, whether the proposed drug represents a significant improvement when compared with other available therapies. Significant improvement may be illustrated by evidence of increased effectiveness in the treatment of a condition, elimination or substantial reduction of a treatment-limiting drug reaction, documented enhancement of patient compliance that may lead to improvement in serious outcomes, and evidence of safety and effectiveness in a new subpopulation. A priority designation is intended to direct overall attention and resources to the evaluation of such applications, and to shorten the FDA's goal for taking action on a marketing application from ten months to six months.

### *Accelerated Approval Pathway*

The FDA may grant accelerated approval to a drug for a serious or life-threatening condition that provides meaningful therapeutic advantage to patients over existing treatments based upon a determination that the drug has an effect on a surrogate endpoint that is reasonably likely to predict clinical benefit. The FDA may also grant accelerated approval for such a drug when the product has an effect on an intermediate clinical endpoint that can be measured earlier than an effect on irreversible morbidity or mortality, or IMM, and that is reasonably likely to predict an effect on irreversible morbidity or mortality or other clinical benefit, taking into account the severity, rarity, or prevalence of the condition and the availability or lack of alternative treatments. Drugs granted accelerated approval must meet the same statutory standards for safety and effectiveness as those granted traditional approval.

For the purposes of accelerated approval, a surrogate endpoint is a marker, such as a laboratory measurement, radiographic image, physical sign, or other measure that is thought to predict clinical benefit, but is

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## [Table of Contents](#)

not itself a measure of clinical benefit. Surrogate endpoints can often be measured more easily or more rapidly than clinical endpoints. An intermediate clinical endpoint is a measurement of a therapeutic effect that is considered reasonably likely to predict the clinical benefit of a drug, such as an effect on IMM. The FDA has limited experience with accelerated approvals based on intermediate clinical endpoints, but has indicated that such endpoints generally may support accelerated approval where the therapeutic effect measured by the endpoint is not itself a clinical benefit and basis for traditional approval, if there is a basis for concluding that the therapeutic effect is reasonably likely to predict the ultimate clinical benefit of a drug.

The accelerated approval pathway is most often used in settings in which the course of a disease is long and an extended period of time is required to measure the intended clinical benefit of a drug, even if the effect on the surrogate or intermediate clinical endpoint occurs rapidly. For example, accelerated approval has been used extensively in the development and approval of drugs for treatment of a variety of cancers in which the goal of therapy is generally to improve survival or decrease morbidity and the duration of the typical disease course requires lengthy and sometimes large clinical trials to demonstrate a clinical or survival benefit.

The accelerated approval pathway is usually contingent on a sponsor's agreement to conduct, in a diligent manner, additional post-approval confirmatory studies to verify and describe the drug's clinical benefit. As a result, a drug candidate approved on this basis is subject to rigorous post-marketing compliance requirements, including the completion of Phase 4 or post-approval clinical trials to confirm the effect on the clinical endpoint. Failure to conduct required post-approval studies, or confirm a clinical benefit during post-marketing studies, would allow the FDA to withdraw the drug from the market on an expedited basis. All promotional materials for drug candidates approved under accelerated regulations are subject to prior review by the FDA.

### *The FDA's Decision on an NDA*

On the basis of the FDA's evaluation of the NDA and accompanying information, including the results of the inspection of the manufacturing facilities, the FDA may issue an approval letter or a complete response letter. An approval letter authorizes commercial marketing of the product with specific prescribing information for specific indications. A complete response letter generally outlines the deficiencies in the submission and may require substantial additional testing or information in order for the FDA to reconsider the application. If and when those deficiencies have been addressed to the FDA's satisfaction in a resubmission of the NDA, the FDA will issue an approval letter. The FDA has committed to reviewing such resubmissions in two or six months depending on the type of information included. Even with submission of this additional information, the FDA ultimately may decide that the application does not satisfy the regulatory criteria for approval.

If the FDA approves a product, it may limit the approved indications for use for the product, require that contraindications, warnings or precautions be included in the product labeling, require that post-approval studies, including Phase 4 clinical trials, be conducted to further assess the drug's safety after approval, require testing and surveillance programs to monitor the product after commercialization, or impose other conditions, including distribution restrictions or other risk management mechanisms, including REMS, which can materially affect the potential market and profitability of the product. The FDA may prevent or limit further marketing of a product based on the results of post-market studies or surveillance programs. After approval, many types of changes to the approved product, such as adding new indications, manufacturing changes and additional labeling claims, are subject to further testing requirements and FDA review and approval.

### *Post-Approval Requirements*

Drugs manufactured or distributed pursuant to FDA approvals are subject to pervasive and continuing regulation by the FDA, including, among other things, requirements relating to recordkeeping, periodic reporting, product sampling and distribution, advertising and promotion and reporting of adverse experiences with the product. After approval, most changes to the approved product, such as adding new indications or other labeling

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## [Table of Contents](#)

claims, are subject to prior FDA review and approval. There also are continuing, annual user fee requirements for any marketed products and the establishments at which such products are manufactured, as well as new application fees for supplemental applications with clinical data.

In addition, drug manufacturers and other entities involved in the manufacture and distribution of approved drugs are required to register their establishments with the FDA and state agencies, and are subject to periodic unannounced inspections by the FDA and these state agencies for compliance with cGMP requirements. Changes to the manufacturing process are strictly regulated and often require prior FDA approval before being implemented. FDA regulations also require investigation and correction of any deviations from cGMP and impose reporting and documentation requirements upon the sponsor and any third-party manufacturers that the sponsor may decide to use. Accordingly, manufacturers must continue to expend time, money and effort in the area of production and quality control to maintain cGMP compliance.

Once an approval is granted, the FDA may withdraw the approval if compliance with regulatory requirements and standards is not maintained or if problems occur after the product reaches the market. Later discovery of previously unknown problems with a product, including adverse events of unanticipated severity or frequency, or with manufacturing processes, or failure to comply with regulatory requirements, may result in revisions to the approved labeling to add new safety information; imposition of post-market studies or clinical trials to assess new safety risks; or imposition of distribution or other restrictions under a REMS program. Other potential consequences include, among other things:

- restrictions on the marketing or manufacturing of the product, suspension of the approval, complete withdrawal of the product from the market or product recalls;
- fines, warning letters or holds on post-approval clinical trials;
- refusal of the FDA to approve pending NDAs or supplements to approved NDAs, or suspension or revocation of product license approvals;
- product seizure or detention, or refusal to permit the import or export of products; or
- injunctions or the imposition of civil or criminal penalties.

The FDA strictly regulates marketing, labeling, advertising and promotion of products that are placed on the market. Drugs may be promoted only for the approved indications and in accordance with the provisions of the approved label. The FDA and other agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses, and a company that is found to have improperly promoted off-label uses may be subject to significant liability.

In addition, the distribution of prescription pharmaceutical products is subject to the Prescription Drug Marketing Act, or PDMA, as well as the Drug Supply Chain Security Act, or DSCA, which regulate the distribution and tracing of prescription drugs and prescription drug samples at the federal level, and set minimum standards for the registration and regulation of drug distributors by the states. Both the PDMA and state laws limit the distribution of prescription pharmaceutical product samples and impose requirements to ensure accountability in distribution. The DSCA imposes requires to ensure accountability in distribution and to identify and remove counterfeit and other illegitimate products from the market.

### *Abbreviated New Drug Applications for Generic Drugs*

In 1984, with passage of the Hatch-Waxman Amendments to the FDCA, Congress authorized the FDA to approve generic drugs that are the same as drugs previously approved by the FDA under the NDA provisions of the statute. To obtain approval of a generic drug, an applicant must submit an abbreviated new drug application, or ANDA, to the agency. In support of such applications, a generic manufacturer may rely on the preclinical and clinical testing previously conducted for a drug product previously approved under an NDA, known as the reference listed drug, or RLD.

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## [Table of Contents](#)

Specifically, in order for an ANDA to be approved, the FDA must find that the generic version is identical to the RLD with respect to the active ingredients, the route of administration, the dosage form, and the strength of the drug. At the same time, the FDA must also determine that the generic drug is “bioequivalent” to the innovator drug. Under the statute, a generic drug is bioequivalent to a RLD if “the rate and extent of absorption of the drug do not show a significant difference from the rate and extent of absorption of the listed drug.”

Upon approval of an ANDA, the FDA indicates whether the generic product is “therapeutically equivalent” to the RLD in its publication “Approved Drug Products with Therapeutic Equivalence Evaluations,” also referred to as the “Orange Book.” Physicians and pharmacists consider a therapeutic equivalent generic drug to be fully substitutable for the RLD. In addition, by operation of certain state laws and numerous health insurance programs, the FDA’s designation of therapeutic equivalence often results in substitution of the generic drug without the knowledge or consent of either the prescribing physician or patient.

Under the Hatch-Waxman Amendments, the FDA may not approve an ANDA until any applicable period of non-patent exclusivity for the RLD has expired. The FDCA provides a period of five years of non-patent data exclusivity for a new drug containing a new chemical entity. A new chemical entity is a drug that contains no active moiety that has previously been approved by the FDA in any other NDA. An active moiety is the molecule or ion responsible for the physiological or pharmacological action of the drug substance. In cases where such exclusivity has been granted, an ANDA may not be filed with the FDA until the expiration of five years unless the submission is accompanied by a Paragraph IV certification, in which case the applicant may submit its application four years following the original product approval. The FDCA also provides for a period of three years of exclusivity if the NDA includes reports of one or more new clinical investigations, other than bioavailability or bioequivalence studies, that were conducted by or for the applicant and are essential to the approval of the application. This three-year exclusivity period often protects changes to a previously approved drug product, such as a new dosage form, route of administration, combination or indication.

### *Hatch-Waxman Patent Certification and the 30-Month Stay*

Upon approval of an NDA or a supplement thereto, NDA sponsors are required to list with the FDA each patent with claims that cover the applicant’s product or an approved method of using the product. Each of the patents listed by the NDA sponsor is published in the Orange Book. When an ANDA applicant files its application with the FDA, the applicant is required to certify to the FDA concerning any patents listed for the reference product in the Orange Book, except for patents covering methods of use for which the ANDA applicant is not seeking approval. To the extent that the Section 505(b)(2) applicant is relying on studies conducted for an already approved product, the applicant is required to certify to the FDA concerning any patents listed for the approved product in the Orange Book to the same extent that an ANDA applicant would.

Specifically, the applicant must certify with respect to each patent that:

- the required patent information has not been filed;
- the listed patent has expired;
- the listed patent has not expired, but will expire on a particular date and approval is sought after patent expiration; or
- the listed patent is invalid, unenforceable or will not be infringed by the new product.

A certification that the new product will not infringe the already approved product’s listed patents or that such patents are invalid or unenforceable is called a Paragraph IV certification. If the applicant does not challenge the listed patents or indicates that it is not seeking approval of a patented method of use, the ANDA application will not be approved until all the listed patents claiming the referenced product have expired (other than method of use patents involving indications for which the ANDA applicant is not seeking approval).



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## [Table of Contents](#)

If the ANDA applicant has provided a Paragraph IV certification to the FDA, the applicant must also send notice of the Paragraph IV certification to the NDA and patent holders once the ANDA has been accepted for filing by the FDA. The NDA and patent holders may then initiate a patent infringement lawsuit in response to the notice of the Paragraph IV certification. The filing of a patent infringement lawsuit within 45 days after the receipt of a Paragraph IV certification automatically prevents the FDA from approving the ANDA until the earlier of 30 months after the receipt of the Paragraph IV notice, expiration of the patent or a decision in the infringement case that is favorable to the ANDA applicant.

### *Pediatric Studies and Exclusivity*

Under the Pediatric Research Equity Act of 2003, an NDA or supplement thereto must contain data that are adequate to assess the safety and effectiveness of the drug product for the claimed indications in all relevant pediatric subpopulations, and to support dosing and administration for each pediatric subpopulation for which the product is safe and effective. With enactment of the Food and Drug Administration Safety and Innovation Act, or FDASIA, in 2012, sponsors must also submit pediatric study plans prior to the assessment data. Those plans must contain an outline of the proposed pediatric study or studies the applicant plans to conduct, including study objectives and design, any deferral or waiver requests and other information required by regulation. The applicant, the FDA, and the FDA's internal review committee must then review the information submitted, consult with each other, and agree upon a final plan. The FDA or the applicant may request an amendment to the plan at any time.

The FDA may, on its own initiative or at the request of the applicant, grant deferrals for submission of some or all pediatric data until after approval of the product for use in adults, or full or partial waivers from the pediatric data requirements. Additional requirements and procedures relating to deferral requests and requests for extension of deferrals are contained in FDASIA. Unless otherwise required by regulation, the pediatric data requirements do not apply to products with orphan designation.

Pediatric exclusivity is another type of non-patent marketing exclusivity in the United States and, if granted, provides for the attachment of an additional six months of marketing protection to the term of any existing regulatory exclusivity, including the non-patent and orphan exclusivity. This six-month exclusivity may be granted if an NDA sponsor submits pediatric data that fairly respond to a written request from the FDA for such data. The data do not need to show the product to be effective in the pediatric population studied; rather, if the clinical trial is deemed to fairly respond to the FDA's request, the additional protection is granted. If reports of requested pediatric studies are submitted to and accepted by the FDA within the statutory time limits, whatever statutory or regulatory periods of exclusivity or patent protection cover the product are extended by six months. This is not a patent term extension, but it effectively extends the regulatory period during which the FDA cannot approve another application.

### *Orphan Drug Designation and Exclusivity*

The FDA has granted orphan drug designation to ezutromid for the treatment of DMD. Under the Orphan Drug Act, the FDA may designate a drug product as an "orphan drug" if it is intended to treat a rare disease or condition (generally meaning that it affects fewer than 200,000 individuals in the United States, or more in cases in which there is no reasonable expectation that the cost of developing and making a drug product available in the United States for treatment of the disease or condition will be recovered from sales of the product). A company must request orphan product designation before submitting an NDA. If the request is granted, the FDA will disclose the identity of the therapeutic agent and its potential use. Orphan product designation does not convey any advantage in or shorten the duration of the regulatory review and approval process.

If a product with orphan status receives the first FDA approval for the disease or condition for which it has such designation or for a select indication or use within the rare disease or condition for which it was designated, the product generally will be receiving orphan product exclusivity. Orphan product exclusivity means that the

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## [Table of Contents](#)

FDA may not approve any other applications for the same product for the same indication for seven years, except in certain limited circumstances. Competitors may receive approval of different products for the indication for which the orphan product has exclusivity and may obtain approval for the same product but for a different indication. If a drug or drug product designated as an orphan product ultimately receives marketing approval for an indication broader than what was designated in its orphan product application, it may not be entitled to exclusivity.

### *GAIN Exclusivity for Antibiotics*

The FDA has designated ridinilazole as a qualified infectious disease product, or QIDP, under the Generating Antibiotic Incentives Now Act, or GAIN Act. Congress passed this legislation to encourage the development of antibacterial and antifungal drug products that treat pathogens that cause serious and life-threatening infections. To that end, the GAIN Act grants an additional five years of exclusivity upon the approval of an NDA for a drug product designated by the FDA as a QIDP. Thus, for a QIDP, the periods of five-year new chemical entity exclusivity, three-year new clinical investigation exclusivity and seven-year orphan drug exclusivity, would become ten years, eight years and 12 years, respectively.

A QIDP is defined in the GAIN Act to mean “an antibacterial or antifungal drug for human use intended to treat serious or life-threatening infections, including those caused by—(1) an antibacterial or antifungal resistant pathogen, including novel or emerging infectious pathogens;” or (2) certain “qualifying pathogens.” A “qualifying pathogen” is a pathogen that has the potential to pose a serious threat to public health (such as resistant gram positive pathogens, multi-drug resistant gram negative bacteria, multi-drug resistant tuberculosis and *Clostridium difficile*) and that is included in a list established and maintained by the FDA. A drug sponsor may request the FDA to designate its product as a QIDP any time before the submission of an NDA. The FDA must make a QIDP determination within 60 days of the designation request. A product designated as a QIDP will be granted priority review by FDA and can qualify for “fast track” status.

The additional five years of exclusivity under the GAIN Act for drug products designated by the FDA as QIDPs applies only to a drug that is first approved on or after July 9, 2012. Additionally, the five year exclusivity extension does not apply to: a supplement to an application under FDCA Section 505(b) for any QIDP for which an extension is in effect or has expired; a subsequent application filed with respect to a product approved by the FDA for a change that results in a new indication, route of administration, dosing schedule, dosage form, delivery system, delivery device or strength; or a product that does not meet the definition of a QIDP under Section 505(g) based upon its approved uses.

### *Patent Term Restoration and Extension*

The term of a U.S. patent that covers a drug, biological product or medical device approved pursuant to a PMA may also be eligible for patent term extension when FDA approval is granted, provided that certain statutory and regulatory requirements are met. The length of the patent term extension is related to the length of time the drug is under regulatory review while the patent is in force. The Hatch-Waxman Act permits a patent term extension of up to five years beyond the expiration date set for the patent. Patent extension cannot extend the remaining term of a patent beyond a total of 14 years from the date of product approval, only one patent applicable to each regulatory review period may be granted an extension and only those claims reading on the approved drug may be extended. Similar provisions are available in Europe and certain other foreign jurisdictions to extend the term of a patent that covers an approved drug, provided that statutory and regulatory requirements are met. The USPTO reviews and approves the application for any patent term extension or restoration in consultation with the FDA.

### *Regulation Outside the United States*

In order to market any product outside of the United States, a company must also comply with numerous and varying regulatory requirements of other countries and jurisdictions regarding quality, safety and efficacy and governing, among other things, clinical trials, marketing authorization, commercial sales and distribution of

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## [Table of Contents](#)

drug products. Whether or not it obtains FDA approval for a product, the company would need to obtain the necessary approvals by the comparable foreign regulatory authorities before it can commence clinical trials or marketing of the product in those countries or jurisdictions. The approval process ultimately varies between countries and jurisdictions and can involve additional product testing and additional administrative review periods. The time required to obtain approval in other countries and jurisdictions might differ from and be longer than that required to obtain FDA approval. Regulatory approval in one country or jurisdiction does not ensure regulatory approval in another, but a failure or delay in obtaining regulatory approval in one country or jurisdiction may negatively impact the regulatory process in others.

### ***Regulation and Marketing Authorization in the European Union***

The process governing approval of medicinal products in the European Union follows essentially the same lines as in the United States and, likewise, generally involves satisfactorily completing each of the following:

- preclinical laboratory tests, animal studies and formulation studies all performed in accordance with the applicable E.U. Good Laboratory Practice regulations;
- submission to the relevant national authorities of a clinical trial application, or CTA, which must be approved before human clinical trials may begin;
- performance of adequate and well-controlled clinical trials to establish the safety and efficacy of the product for each proposed indication;
- submission to the relevant competent authorities of a marketing authorization application, or MAA, which includes the data supporting safety and efficacy as well as detailed information on the manufacture and composition of the product in clinical development and proposed labelling;
- satisfactory completion of an inspection by the relevant national authorities of the manufacturing facility or facilities, including those of third parties, at which the product is produced to assess compliance with strictly enforced current cGMP;
- potential audits of the non-clinical and clinical trial sites that generated the data in support of the MAA; and
- review and approval by the relevant competent authority of the MAA before any commercial marketing, sale or shipment of the product.

### ***Preclinical Studies***

Preclinical tests include laboratory evaluations of product chemistry, formulation and stability, as well as studies to evaluate toxicity in animal studies, in order to assess the potential safety and efficacy of the product. The conduct of the preclinical tests and formulation of the compounds for testing must comply with the relevant E.U. regulations and requirements. The results of the preclinical tests, together with relevant manufacturing information and analytical data, are submitted as part of the CTA.

### ***Clinical Trial Approval***

Requirements for the conduct of clinical trials in the European Union including Good Clinical Practice, or GCP, are implemented in the Clinical Trials Directive 2001/20/EC and the GCP Directive 2005/28/EC. Pursuant to Directive 2001/20/EC and Directive 2005/28/EC, as amended, a system for the approval of clinical trials in the European Union has been implemented through national legislation of the member states. Under this system, approval must be obtained from the competent national authority of an E.U. member state in which a study is planned to be conducted, or in multiple member states if the clinical trial is to be conducted in a number of member states. To this end, a CTA is submitted, which must be supported by an investigational medicinal product dossier, or IMPD, and further supporting information prescribed by Directive 2001/20/EC and Directive 2005/28/EC and other applicable guidance documents. Furthermore, a clinical trial may only be started after a competent ethics committee has issued a favorable opinion on the clinical trial application in that country.

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## [Table of Contents](#)

In April 2014, the E.U. legislator passed the new Clinical Trials Regulation, (EU) No 536/2014, which will replace the current Clinical Trials Directive 2001/20/EC. To ensure that the rules for clinical trials are identical throughout the European Union, the new E.U. clinical trials legislation was passed as a regulation that is directly applicable in all E.U. member states. All clinical trials performed in the European Union are required to be conducted in accordance with the Clinical Trials Directive 2001/20/EC until the new Clinical Trials Regulation (EU) No 536/2014 becomes applicable, which will be no earlier than May 28, 2016.

The new Regulation (EU) No 536/2014 aims to simplify and streamline the approval of clinical trial in the European Union. The main characteristics of the regulation include:

- A streamlined application procedure via a single entry point, the E.U. portal.
- A single set of documents to be prepared and submitted for the application as well as simplified reporting procedures that will spare sponsors from submitting broadly identical information separately to various bodies and different member states.
- A harmonized procedure for the assessment of applications for clinical trials, which is divided in two parts. Part I is assessed jointly by all member states concerned. Part II is assessed separately by each member state concerned.
- Strictly defined deadlines for the assessment of clinical trial application.
- The involvement of the ethics committees in the assessment procedure in accordance with the national law of the member state concerned but within the overall timelines defined by the Regulation (EU) No 536/2014.

### *Marketing Authorization*

Authorization to market a product in the member states of the European Union proceeds under one of four procedures: a centralized authorization procedure, a mutual recognition procedure, a decentralized procedure or a national procedure.

### *Centralized Authorization Procedure*

The centralized procedure enables applicants to obtain a marketing authorization that is valid in all E.U. member states based on a single application. Certain medicinal products, including products developed by means of biotechnological processes, must undergo the centralized authorization procedure for marketing authorization, which, if granted by the European Commission, is automatically valid in all 28 E.U. member states. The EMA and the European Commission administer this centralized authorization procedure pursuant to Regulation (EC) No 726/2004.

Pursuant to Regulation (EC) No 726/2004, this procedure is mandatory for:

- medicinal products developed by means of one of the following biotechnological processes:
  - recombinant DNA technology;
  - controlled expression of genes coding for biologically active proteins in prokaryotes and eukaryotes including transformed mammalian cells; and
  - hybridoma and monoclonal antibody methods;
- advanced therapy medicinal products as defined in Article 2 of Regulation (EC) No. 1394/2007 on advanced therapy medicinal products;

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## Table of Contents

- medicinal products for human use containing a new active substance that, on the date of effectiveness of this regulation, was not authorized in the European Union, and for which the therapeutic indication is the treatment of any of the following diseases:
  - acquired immune deficiency syndrome;
  - cancer;
  - neurodegenerative disorder;
  - diabetes;
  - auto-immune diseases and other immune dysfunctions; and
  - viral diseases; and
- medicinal products that are designated as orphan medicinal products pursuant to Regulation (EC) No 141/2000.

The centralized authorization procedure is optional for other medicinal products if they contain a new active substance or if the applicant shows that the medicinal product concerned constitutes a significant therapeutic, scientific or technical innovation or that the granting of authorization is in the interest of patients in the European Union.

### *Administrative Procedure*

Under the centralized authorization procedure, the EMA's Committee for Human Medicinal Products, or CHMP, serves as the scientific committee that renders opinions about the safety, efficacy and quality of medicinal products for human use on behalf of the EMA. The CHMP is composed of experts nominated by each member state's national authority for medicinal products, with expert appointed to act as Rapporteur for the co-ordination of the evaluation with the possible assistance of a further member of the Committee acting as a Co-Rapporteur. After approval, the Rapporteur(s) continue to monitor the product throughout its life cycle. The CHMP has 210 days to adopt an opinion as to whether a marketing authorization should be granted. The process usually takes longer in case additional information is requested, which triggers clock-stops in the procedural timelines. The process is complex and involves extensive consultation with the regulatory authorities of member states and a number of experts. When an application is submitted for a marketing authorization in respect of a drug that is of major interest from the point of view of public health and in particular from the viewpoint of therapeutic innovation, the applicant may pursuant to Article 14(9) Regulation (EC) No 726/2004 request an accelerated assessment procedure. If the CHMP accepts such request, the time-limit of 210 days will be reduced to 150 days but it is possible that the CHMP can revert to the standard time-limit for the centralized procedure if it considers that it is no longer appropriate to conduct an accelerated assessment. Once the procedure is completed, a European Public Assessment Report, or EPAR, is produced. If the opinion is negative, information is given as to the grounds on which this conclusion was reached. After the adoption of the CHMP opinion, a decision on the MAA must be adopted by the European Commission, after consulting the E.U. member states, which in total can take more than 60 days.

### *Conditional Approval*

In specific circumstances, E.U. legislation (Article 14(7) Regulation (EC) No 726/2004 and Regulation (EC) No 507/2006 on Conditional Marketing Authorisations for Medicinal Products for Human Use) enables applicants to obtain a conditional marketing authorization prior to obtaining the comprehensive clinical data required for an application for a full marketing authorization. Such conditional approvals may be granted for product candidates (including medicines designated as orphan medicinal products) if (1) the risk-benefit balance of the product candidate is positive, (2) it is likely that the applicant will be in a position to provide the required comprehensive clinical trial data, (3) the product fulfills unmet medical needs and (4) the benefit to public health of the immediate availability on the market of the medicinal product concerned outweighs the risk inherent in the fact that additional data are still required. A conditional marketing authorization may contain specific obligations

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## [Table of Contents](#)

to be fulfilled by the marketing authorization holder, including obligations with respect to the completion of ongoing or new studies, and with respect to the collection of pharmacovigilance data. Conditional marketing authorizations are valid for one year, and may be renewed annually, if the risk-benefit balance remains positive, and after an assessment of the need for additional or modified conditions and/or specific obligations. The timelines for the centralized procedure described above also apply with respect to the review by the CHMP of applications for a conditional marketing authorization.

### *Marketing Authorization under Exceptional Circumstances*

Under Article 14(8) Regulation (EC) No 726/2004, products for which the applicant can demonstrate that comprehensive data (in line with the requirements laid down in Annex I of Directive 2001/83/EC, as amended) cannot be provided (due to specific reasons foreseen in the legislation) might be eligible for marketing authorization under exceptional circumstances. This type of authorization is reviewed annually to reassess the risk-benefit balance. The fulfillment of any specific procedures/obligations imposed as part of the marketing authorization under exceptional circumstances is aimed at the provision of information on the safe and effective use of the product and will normally not lead to the completion of a full dossier/approval.

### *Market Authorizations Granted by Authorities of E.U. Member States*

In general, if the centralized procedure is not followed, there are three alternative procedures as prescribed in Directive 2001/83/EC:

- The decentralized procedure allows applicants to file identical applications to several E.U. member states and receive simultaneous national approvals based on the recognition by E.U. member states of an assessment by a reference member state.
- The national procedure is only available for products intended to be authorized in a single E.U. member state.
- A mutual recognition procedure similar to the decentralized procedure is available when a marketing authorization has already been obtained in at least one E.U. member state.

A marketing authorization may be granted only to an applicant established in the European Union.

### *Pediatric Studies*

Prior to obtaining a marketing authorization in the European Union, applicants have to demonstrate compliance with all measures included in an EMA-approved Paediatric Investigation Plan, or PIP, covering all subsets of the paediatric population, unless the EMA has granted a product-specific waiver, a class waiver, or a deferral for one or more of the measures included in the PIP. The respective requirements for all marketing authorization procedures are set forth in Regulation (EC) No 1901/2006, which is referred to as the Pediatric Regulation. This requirement also applies when a company wants to add a new indication, pharmaceutical form or route of administration for a medicine that is already authorized. The Pediatric Committee of the EMA, or PDCO, may grant deferrals for some medicines, allowing a company to delay development of the medicine in children until there is enough information to demonstrate its effectiveness and safety in adults. The PDCO may also grant waivers when development of a medicine in children is not needed or is not appropriate, such as for diseases that only affect the elderly population.

Before a marketing authorization application can be filed, or an existing marketing authorization can be amended, the EMA determines that companies actually comply with the agreed studies and measures listed in each relevant PIP.

### *Periods of Authorization and Renewals*

A marketing authorization is valid for five years in principle and the marketing authorization may be renewed after five years on the basis of a re-evaluation of the risk-benefit balance by the EMA or by the

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## [Table of Contents](#)

competent authority of the authorizing member state. To this end, the marketing authorization holder must provide the EMA or the competent authority with a consolidated version of the file in respect of quality, safety and efficacy, including all variations introduced since the marketing authorization was granted, at least six months before the marketing authorization ceases to be valid. Once renewed, the marketing authorization is valid for an unlimited period, unless the European Commission or the competent authority decides, on justified grounds relating to pharmacovigilance, to proceed with one additional five-year renewal. Any authorization which is not followed by the actual placing of the drug on the E.U. market (in case of centralized procedure) or on the market of the authorizing member state within three years after authorization ceases to be valid (the so-called sunset clause).

### *Orphan Drug Designation and Exclusivity*

The European Commission, following an evaluation by the EMA's Committee for Orphan Medicinal Products, has designated ezutromid as an orphan medicinal product (EU orphan designation number: EU/3/08/591). Pursuant to Regulation (EC) No 141/2000 and Regulation (EC) No. 847/2000, the European Commission can grant such orphan medicinal product designation to products for which the sponsor can establish that it is intended for the diagnosis, prevention or treatment of a life-threatening or chronically debilitating condition affecting not more than five in 10,000 people in the European Union, or a life threatening, seriously debilitating or serious and chronic condition in the European Union and that without incentives it is unlikely that sales of the drug in the European Union would generate a sufficient return to justify the necessary investment. In addition, the sponsor must establish that there is no other satisfactory method approved in the European Union of diagnosing, preventing or treating the condition, or if such a method exists, the proposed orphan drug will be of significant benefit to patients.

Orphan drug designation is not a marketing authorization. It is a designation that provides a number of benefits, including fee reductions, regulatory assistance, and the possibility to apply for a centralized E.U. marketing authorization, as well as ten years of market exclusivity following a marketing authorization. During this market exclusivity period, neither the EMA, the European Commission nor the member states can accept an application or grant a marketing authorization for a "similar medicinal product." A "similar medicinal product" is defined as a medicinal product containing a similar active substance or substances as those contained in an authorized orphan medicinal product and that is intended for the same therapeutic indication. The market exclusivity period for the authorized therapeutic indication may be reduced to six years if, at the end of the fifth year, it is established that the orphan designation criteria are no longer met, including where it is shown that the product is sufficiently profitable not to justify maintenance of market exclusivity. In addition, a competing similar medicinal product may in limited circumstances be authorized prior to the expiration of the market exclusivity period, including if it is shown to be safer, more effective or otherwise clinically superior to the already approved orphan drug. Furthermore, a product can lose orphan designation, and the related benefits, prior to us obtaining a marketing authorization if it is demonstrated that the orphan designation criteria are no longer met.

### *Regulatory Data Protection*

E.U. legislation also provides for a system of regulatory data and market exclusivity. According to Article 14(1) of Regulation (EC) No 726/2004, as amended, and Article 10(1) of Directive 2001/83/EC, as amended, upon receiving marketing authorization, new chemical entities approved on the basis of complete independent data package benefit from eight years of data exclusivity and an additional two years of market exclusivity. Data exclusivity prevents regulatory authorities in the European Union from referencing the innovator's data to assess a generic (abbreviated) application. During the additional two-year period of market exclusivity, a generic marketing authorization can be submitted, and the innovator's data may be referenced, but no generic medicinal product can be marketed until the expiration of the market exclusivity. The overall ten-year period will be extended to a maximum of 11 years if, during the first eight years of those ten years, the marketing authorization holder, or MAH, obtains an authorization for one or more new therapeutic indications which, during the scientific

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## [Table of Contents](#)

evaluation prior to their authorization, are held to bring a significant clinical benefit in comparison with existing therapies. Even if a compound is considered to be a new chemical entity and the innovator is able to gain the period of data exclusivity, another company nevertheless could also market another version of the drug if such company obtained marketing authorization based on an MAA with a complete independent data package of pharmaceutical test, preclinical tests and clinical trials. However, products designated as orphan medicinal products enjoy, upon receiving marketing authorization, a period of ten years of orphan market exclusivity—see also *Orphan Drug Designation and Exclusivity*. Depending upon the timing and duration of the E.U. marketing authorization process, products may be eligible for up to five years' supplementary protection certificates, or SPCs, pursuant to Regulation (EC) No 469/2009. Such SPCs extend the rights under the basic patent for the drug.

### *Regulatory Requirements After a Marketing Authorization has been Obtained*

If we obtain authorization for a medicinal product in the European Union, we will be required to comply with a range of requirements applicable to the manufacturing, marketing, promotion and sale of medicinal products:

#### *Pharmacovigilance and other requirements*

We will, for example, have to comply with the E.U.'s stringent pharmacovigilance or safety reporting rules, pursuant to which post-authorization studies and additional monitoring obligations can be imposed. Other requirements relate, for example, to the manufacturing of products and APIs in accordance with good manufacturing practice standards. E.U. regulators may conduct inspections to verify our compliance with applicable requirements, and we will have to continue to expend time, money and effort to remain compliant. Non-compliance with E.U. requirements regarding safety monitoring or pharmacovigilance, and with requirements related to the development of products for the pediatric population, can also result in significant financial penalties in the European Union. Similarly, failure to comply with the E.U.'s requirements regarding the protection of individual personal data can also lead to significant penalties and sanctions. Individual E.U. member states may also impose various sanctions and penalties in case we do not comply with locally applicable requirements.

#### *Manufacturing*

The manufacturing of authorized drugs, for which a separate manufacturer's license is mandatory, must be conducted in strict compliance with the EMA's Good Manufacturing Practices, or GMP, requirements and comparable requirements of other regulatory bodies in the European Union, which mandate the methods, facilities and controls used in manufacturing, processing and packing of drugs to assure their safety and identity. The EMA enforces its current GMP requirements through mandatory registration of facilities and inspections of those facilities. The EMA may have a coordinating role for these inspections while the responsibility for carrying them out rests with the member states competent authority under whose responsibility the manufacturer falls. Failure to comply with these requirements could interrupt supply and result in delays, unanticipated costs and lost revenues, and could subject the applicant to potential legal or regulatory action, including but not limited to warning letters, suspension of manufacturing, seizure of product, injunctive action or possible civil and criminal penalties.

#### *Marketing and Promotion*

The marketing and promotion of authorized drugs, including industry-sponsored continuing medical education and advertising directed toward the prescribers of drugs and/or the general public, are strictly regulated in the European Union under Directive 2001/83/EC. The applicable regulations aim to ensure that information provided by holders of marketing authorizations regarding their products is truthful, balanced and accurately reflects the safety and efficacy claims authorized by the EMA or by the competent authority of the authorizing member state. Failure to comply with these requirements can result in adverse publicity, warning letters, corrective advertising and potential civil and criminal penalties.



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## [Table of Contents](#)

### *Patent Term Extension*

In order to compensate the patentee for delays in obtaining a marketing authorization for a patented product, a supplementary certificate, or SPC, may be granted extending the exclusivity period for that specific product by up to five years. Applications for SPCs must be made to the relevant patent office in each E.U. member state and the granted certificates are valid only in the member state of grant. An application has to be made by the patent owner within six months of the first marketing authorization being granted in the European Union (assuming the patent in question has not expired, lapsed or been revoked) or within six months of the grant of the patent (if the marketing authorization is granted first). In the context of SPCs, the term “product” means the active ingredient or combination of active ingredients for a medicinal product and the term “patent” means a patent protecting such a product or a new manufacturing process or application for it. The duration of an SPC is calculated as the difference between the patent’s filing date and the date of the first marketing authorization, minus five years, subject to a maximum term of five years.

A six month pediatric extension of an SPC may be obtained where the patentee has carried out an agreed pediatric investigation plan, the authorized product information includes information on the results of the studies and the product is authorized in all member states of the European Union.

### *Pharmaceutical Coverage, Pricing and Reimbursement*

Significant uncertainty exists as to the coverage and reimbursement status of products approved by the FDA and other government authorities. Sales of products will depend, in part, on the extent to which the costs of the products will be covered by third-party payors, including government health programs in the United States such as Medicare and Medicaid, commercial health insurers and managed care organizations. The process for determining whether a payor will provide coverage for a product may be separate from the process for setting the price or reimbursement rate that the payor will pay for the product once coverage is approved. Third-party payors may limit coverage to specific products on an approved list, or formulary, which might not include all of the approved products for a particular indication. Additionally, the containment of healthcare costs has become a priority of federal and state governments, and the prices of drugs have been a focus in this effort. The U.S. government, state legislatures and foreign governments have shown significant interest in implementing cost-containment programs, including price controls, restrictions on reimbursement and requirements for substitution of generic products. Adoption of price controls and cost-containment measures, and adoption of more restrictive policies in jurisdictions with existing controls and measures, could further limit our net revenue and results.

In order to secure coverage and reimbursement for any product that might be approved for sale, a company may need to conduct expensive pharmacoeconomic studies in order to demonstrate the medical necessity and cost-effectiveness of the product, in addition to the costs required to obtain FDA or other comparable regulatory approvals. A payor’s decision to provide coverage for a drug product does not imply that an adequate reimbursement rate will be approved. Third-party reimbursement may not be sufficient to maintain price levels high enough to realize an appropriate return on investment in product development.

In the European Union, pricing and reimbursement schemes vary widely from country to country. Some countries provide that drug products may be marketed only after a reimbursement price has been agreed. Some countries may require the completion of additional studies that compare the cost-effectiveness of our drug candidate to currently available therapies (so called health technology assessment, or HTA) in order to obtain reimbursement or pricing approval. For example, the European Union provides options for its member states to restrict the range of drug products for which their national health insurance systems provide reimbursement and to control the prices of medicinal products for human use. E.U. member states may approve a specific price for a drug product or it may instead adopt a system of direct or indirect controls on the profitability of the company placing the drug product on the market. Other member states allow companies to fix their own prices for drug products, but monitor and control prescription volumes and issue guidance to physicians to limit prescriptions. The downward pressure on health care costs in general, particularly prescription drugs, has become intense. As a

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## [Table of Contents](#)

result, increasingly high barriers are being erected to the entry of new products. In addition, there can be considerable pressure by governments and other stakeholders on prices and reimbursement levels, including as part of cost containment measures. Political, economic and regulatory developments may further complicate pricing negotiations, and pricing negotiations may continue after reimbursement has been obtained. Reference pricing used by various E.U. member states, and parallel distribution (arbitrage between low-priced and high-priced member states), can further reduce prices. Any country that has price controls or reimbursement limitations for drug products may not allow favorable reimbursement and pricing arrangements.

### ***Healthcare Law and Regulation***

Healthcare providers, physicians and third-party payors play a primary role in the recommendation and prescription of drug products that are granted marketing approval. Arrangements with providers, consultants, third-party payors and customers are subject to broadly applicable fraud and abuse and other healthcare laws and regulations. Such restrictions under applicable federal and state healthcare laws and regulations, include the following:

- the federal Anti-Kickback Statute prohibits, among other things, persons from knowingly and willfully soliciting, offering, receiving or providing remuneration, directly or indirectly, in cash or in kind, to induce or reward either the referral of an individual for, or the purchase, order or recommendation of, any good or service, for which payment may be made, in whole or in part, under a federal healthcare program such as Medicare and Medicaid;
- the federal False Claims Act imposes civil penalties, and provides for civil whistleblower or qui tam actions, against individuals or entities for knowingly presenting, or causing to be presented, to the federal government, claims for payment that are false or fraudulent or making a false statement to avoid, decrease or conceal an obligation to pay money to the federal government;
- the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, imposes criminal and civil liability for executing a scheme to defraud any healthcare benefit program or making false statements relating to healthcare matters;
- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act and its implementing regulations, including the Final Omnibus Rule published in January 2013, also imposes obligations, including mandatory contractual terms, with respect to safeguarding the privacy, security and transmission of individually identifiable health information;
- the federal false statements statute prohibits knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false statement in connection with the delivery of or payment for healthcare benefits, items or services;
- the federal transparency requirements under the Patient Protection and Affordable Care Act, known as the federal Physician Payments Sunshine Act, will require certain manufacturers of drugs, devices, biologics and medical supplies to report to the Center for Medicare & Medicaid Services, or CMS, within the Department of Health and Human Services information related to payments and other transfers of value to physicians and teaching hospitals and physician ownership and investment interests held by physicians and their immediate family members; and
- analogous state and foreign laws and regulations, such as state anti-kickback and false claims laws, may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental third-party payors, including private insurers.

Some state laws require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government in addition to requiring drug manufacturers to report information related to payments to physicians and other health care

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## [Table of Contents](#)

providers or marketing expenditures. State and foreign laws also govern the privacy and security of health information in some circumstances, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts.

### ***Healthcare Reform***

A primary trend in the United States healthcare industry and elsewhere is cost containment. There have been a number of federal and state proposals during the last few years regarding the pricing of pharmaceutical and biopharmaceutical products, limiting coverage and reimbursement for drugs and other medical products, government control and other changes to the healthcare system in the United States.

By way of example, the United States and state governments continue to propose and pass legislation designed to reduce the cost of healthcare. In March 2010, the United States Congress enacted the Affordable Care Act, which, among other things, includes changes to the coverage and payment for products under government health care programs. Among the provisions of the Affordable Care Act of importance to potential drug candidates are:

- an annual, nondeductible fee on any entity that manufactures or imports specified branded prescription drugs and biologic agents, apportioned among these entities according to their market share in certain government healthcare programs, although this fee would not apply to sales of certain products approved exclusively for orphan indications;
- expansion of eligibility criteria for Medicaid programs by, among other things, allowing states to offer Medicaid coverage to certain individuals with income at or below 133% of the federal poverty level, thereby potentially increasing a manufacturer's Medicaid rebate liability;
- expanded manufacturers' rebate liability under the Medicaid Drug Rebate Program by increasing the minimum rebate for both branded and generic drugs and revising the definition of "average manufacturer price," or AMP, for calculating and reporting Medicaid drug rebates on outpatient prescription drug prices and extending rebate liability to prescriptions for individuals enrolled in Medicare Advantage plans;
- addressed a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for drugs that are inhaled, infused, instilled, implanted or injected;
- expanded the types of entities eligible for the 340B drug discount program;
- established the Medicare Part D coverage gap discount program by requiring manufacturers to provide a 50% point-of-sale-discount off the negotiated price of applicable brand drugs to eligible beneficiaries during their coverage gap period as a condition for the manufacturers' outpatient drugs to be covered under Medicare Part D;
- a new Patient-Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research;
- the Independent Payment Advisory Board, or IPAB, which has authority to recommend certain changes to the Medicare program to reduce expenditures by the program that could result in reduced payments for prescription drugs. However, the IPAB implementation has been not been clearly defined. PPACA provided that under certain circumstances, IPAB recommendations will become law unless Congress enacts legislation that will achieve the same or greater Medicare cost savings; and
- established the Center for Medicare and Medicaid Innovation within CMS to test innovative payment and service delivery models to lower Medicare and Medicaid spending, potentially including prescription drug spending. Funding has been allocated to support the mission of the Center for Medicare and Medicaid Innovation from 2011 to 2019.

Other legislative changes have been proposed and adopted in the United States since the Affordable Care Act was enacted. For example, in August 2011, the Budget Control Act of 2011, among other things, created

## [Table of Contents](#)

measures for spending reductions by Congress. A Joint Select Committee on Deficit Reduction, tasked with recommending a targeted deficit reduction of at least \$1.2 trillion for the years 2012 through 2021, was unable to reach required goals, thereby triggering the legislation's automatic reduction to several government programs. This includes aggregate reductions of Medicare payments to providers of up to 2% per fiscal year, which went into effect in April 2013 and will remain in effect through 2024 unless additional Congressional action is taken. In January 2013, President Obama signed into law the American Taxpayer Relief Act of 2012, which, among other things, further reduced Medicare payments to several providers, including hospitals, imaging centers and cancer treatment centers, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years.

### C. Organizational Structure

The following is a list of our subsidiaries:

<u>Name of subsidiary</u>	<u>Country of registration</u>	<u>Activity</u>	<u>% holding</u>
Summit Therapeutics Inc.	USA	Research and Development Services	100%
Summit Corporation Limited	England and Wales	Dormant	100%
Summit (Oxford) Limited	England and Wales	Research and Development	100%
Summit (Wales) Limited	England and Wales	Research and Development	100%
Summit (Cambridge) Limited	England and Wales	Dormant	100%
Summit Discovery 1 Limited	England and Wales	Dormant	100%
Summit Corporation Employee Benefit Trust Company Limited	England and Wales	Dormant	100%
MuOx Limited	England and Wales	Research and Development	100%

### D. Property, Plants and Equipment

<u>Type/Uses</u>	<u>Location</u>	<u>Size</u>	<u>Lease Expiry</u>
Executive office	Oxfordshire, United Kingdom	4,373 square feet	June 2019
Executive office	Cambridge, Massachusetts	682 square feet	Rolling

#### Item 4A: Unresolved Staff Comments

Not applicable.

#### Item 5: Operating and Financial Review and Prospects

*You should read the following discussion and analysis of our financial condition and results of operations together with "Selected Consolidated Financial Data" and our consolidated financial statements and the related notes thereto appearing at the end of this Annual Report. We present our consolidated financial statements in pounds sterling and in accordance with International Financial Reporting Standards, or IFRS, as issued by the International Accounting Standards Board, or IASB.*

*Some information included in this discussion and analysis, including statements regarding industry outlook, our expectations regarding our future performance, liquidity and capital resources and other statements regarding our plans and strategy for our business and related financing, are forward-looking statements. These forward-looking statements are subject to numerous risks and uncertainties. You should read the "Risk Factors" section of this Annual Report for a discussion of important factors that could cause actual results to differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis.*

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## [Table of Contents](#)

*Solely for the convenience of the reader, unless otherwise indicated, all pound sterling amounts as of and for the year ended January 31, 2016 have been translated into U.S. dollars at the noon buying rate of the Federal Reserve Bank of New York on January 29, 2016, of £1.00 to \$1.4184. These translations should not be considered representations that any such amounts have been, could have been or could be converted into U.S. dollars at that or any other exchange rate as of that or any other date.*

### **Overview**

We were founded in 2003 and are incorporated under the laws of England and Wales with the Registrar of Companies of England and Wales, United Kingdom. Our principal offices are located in the United Kingdom. Our ordinary shares have traded on AIM, which is a sub-market of the London Stock Exchange, since October 2004 and our American Depositary Shares, or ADSs, have traded on the NASDAQ Global Market since March 2015. Our historic business activities have included the research and development of drug candidates across a number of disease areas. We have also in the past provided drug discovery services to other pharmaceutical and biotechnology companies. However, we sold these drug discovery services businesses in 2009 as part of a broader restructuring initiative to focus on identifying and developing medicines in a range of major therapy areas. In 2012, we made a strategic decision to further refine our business focus and concentrate on the development of our clinical stage programs for DMD and CDI, in order to more efficiently capitalize on the scientific and commercial potential of these programs. Accordingly, we discontinued our in-house discovery efforts relating to the development of an iminosugar technology platform. We expanded our future generation utrophin modulator pipeline effort in November 2013 through the formation of a strategic alliance with the University of Oxford. As part of this transaction, we acquired an exclusive option to license intellectual property that is generated as part of our research with the University of Oxford in utrophin modulation. In 2014, we opened an office in Cambridge, Massachusetts, in order to strengthen our presence in the United States. We expect to undertake a significant proportion of our future development efforts for our clinical programs in the United States.

To date, we have financed our operations primarily through the issuance of our ordinary shares and American Depositary Shares and development funding and other assistance from government entities, philanthropic, non-government and not for profit organizations and patient advocacy groups for our product candidates. In particular, we have received funding from the Wellcome Trust, Innovate UK, Joining Jack, the Muscular Dystrophy Association, Parent Project Muscular Dystrophy, Charley's Fund, Cure Duchenne, Foundation to Eradicate Duchenne and the Nash Avery Foundation.

We have generated losses since inception. Our net loss was approximately £17.1 million for the year ended January 31, 2016, £11.3 million for the year ended January 31, 2015 and £6.1 million for the year ended January 31, 2014. As of January 31, 2016, we had an accumulated deficit of £47.3 million. We expect to incur significant expenses and increasing operating losses for at least the next several years in connection with conducting clinical trials for our lead product candidates, ezutromid (formerly SMT C1100) for the treatment of DMD and ridinilazole (formerly SMT19969) for the treatment of CDI, and seeking marketing approval for ezutromid and ridinilazole in the United States and the European Union as well as other geographies. In addition, subject to obtaining regulatory approval for ezutromid, ridinilazole or any of our future product candidates, we expect to incur significant commercialization expenses for product sales, marketing, distribution and outsourced manufacturing. We also incur additional costs associated with operating as a public company in the United States in addition to in the United Kingdom. Accordingly, we will need additional financing to support our continuing operations. Adequate additional financing may not be available to us on acceptable terms, or at all. If we are unable to raise capital when needed or on attractive terms, we could be forced to delay, reduce or eliminate our research and development programs or any future commercialization efforts.

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[Table of Contents](#)

**Operating Results**

**Important Financial and Operating Terms and Concepts**

*Other Operating Income*

Other operating income primarily consists of amounts received from philanthropic, non-government and not for profit organizations and patient advocacy groups and income received from the Wellcome Trust. Other operating income also includes grant income from government entities, including Innovate UK. In October 2012, we entered into a translation award funding agreement with the Wellcome Trust to support Phase 1 and Phase 2 clinical trials of ridinilazole for the treatment of CDI. We are eligible to receive up to £4.0 million from the Wellcome Trust under this award, of which we have received £3.9 million. This award followed an award funding agreement we entered into with the Wellcome Trust in October 2009, under which we received £2.3 million. In September 2013, we entered into an agreement with Innovate UK for funding of up to £2.4 million to support development of ezutromid, of which we have received £1.7 million by January 31, 2016.

*Operating Expenses*

The majority of our operating expenses since inception have consisted primarily of research and development activities and general and administrative costs.

*Research and Development Expenses*

Research and development expenses consist of all costs associated with our research and development activities.

These include:

- costs incurred in conducting our preclinical studies and clinical trials through contract research organizations, including preclinical toxicology, pharmacology, formulation and manufacturing work;
- employee related expenses, which include salary and benefits, for our research and development staff;
- costs associated with our strategic alliance with the University of Oxford; and
- facilities, depreciation and other expenses, which include direct and allocated expenses for rent and maintenance of facilities, insurance and other supplies.

We utilize our employee and infrastructure resources across multiple research projects. We track expenses related to our clinical programs and certain preclinical programs on a per project basis. We expect our research and development expenses to continue to increase as compared to prior periods as we initiate and continue clinical trials of ezutromid for the treatment of DMD and ridinilazole for the treatment of CDI and continue our research activities and initiate preclinical programs for future product candidates. The timing and amount of these expenses will depend upon the outcome of our ongoing clinical trials and the costs associated with our planned clinical trials. The timing and amount of these expenses will also depend on the costs associated with potential future clinical trials of our product candidates and the related expansion of our research and development organization, regulatory requirements, advancement of our preclinical programs and product candidate manufacturing costs.

## [Table of Contents](#)

The table below summarizes our research and development expenses by category. Our DMD and CDI program expenses include costs paid to contract research organizations, manufacturing costs for our clinical trials, laboratory testing costs and research related expenses incurred in connection with our strategic alliance with the University of Oxford. Other research and development costs include staff and travel costs (including those of our internal DMD and CDI teams), research and development related legal costs, ongoing patent maintenance fees an allocation of facility-related costs and historically non-core program related expenses.

	2016	Year ended January 31,		2014
		2016	2015	
		(in thousands)		
DMD program	\$10,674	£ 7,526	£ 4,719	£2,898
CDI program	7,896	5,567	3,211	2,115
Other research and development costs	5,338	3,763	2,487	1,598
Total	<u>\$23,908</u>	<u>£16,856</u>	<u>£10,417</u>	<u>£6,611</u>

From inception to January 31, 2016, our total DMD program expenses were £18.3 million and our total CDI program expenses were £13.7 million.

The successful development and commercialization of our product candidates is highly uncertain. At this time, we cannot reasonably estimate or know the nature, timing and estimated costs of the efforts that will be necessary to complete the remainder of the development of ezutromid, ridinilazole or any of our future product candidates. This is due to the numerous risks and uncertainties associated with product development and commercialization, including the uncertainty of

- the progress, costs and results of clinical trials of ezutromid for DMD and ridinilazole for CDI;
- the scope, rate of progress, costs and results of preclinical development, laboratory testing and clinical trials for our potential optimized formulation of ezutromid, internally developed second generation utrophin modulators, and future generation modulators;
- the costs, timing and outcome of regulatory review of our product candidates;
- the efficacy and potential advantages of our product candidates compared to alternative treatments, including any standard of care, and our ability to achieve market acceptance for any of our product candidates that receive marketing approval;
- the costs and timing of commercialization activities, including product sales, marketing, distribution and manufacturing, for any of our product candidates that receive marketing approval and the rate we expand our physical presence in the United States; and
- the costs and timing of preparing, filing and prosecuting patent applications, maintaining, enforcing and protecting our intellectual property rights and defending against any intellectual property-related claims.

A change in the outcome of any of these variables with respect to the development of ezutromid or ridinilazole or any other future product candidate that we may develop could result in a significant change in the costs and timing associated with the development of that product candidate. For example, if the European Medicines Agency, or EMA, the U.S. Food and Drug Administration, or the FDA, or another regulatory authority were to require us to conduct clinical trials or other testing beyond those that we currently contemplate will be required for the completion of clinical development of ezutromid or ridinilazole or any other future product candidate, or if we experience significant delays in enrollment in any of our clinical trials, we could be required to expend significant additional resources and time on the completion of clinical development of that product candidate.

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## [Table of Contents](#)

### *General and Administration Expenses*

General and administration expenses consist primarily of salaries and benefits related to our executive, finance, business development, human resources and support functions. Other general and administration expenses include share-based compensation expenses, facility-related costs and expenses associated with the requirements of being a listed public company in the United Kingdom and the United States, including insurance, legal, professional, audit and taxation services fees.

We anticipate that our general and administration expenses will continue to increase in the future as we increase our headcount to support our continued research and development and potential commercialization of our product candidates. We also anticipate continued increased accounting, audit, regulatory, compliance, insurance and investor and public relations expenses associated with being a publicly traded company in the United Kingdom and the United States. Our ADSs have traded on the NASDAQ Global Market since March 5, 2015.

### *Taxation*

As a U.K. resident trading entity, we are subject to U.K. corporate taxation. Due to the nature of our business, we have generated losses since inception. To date, we have not recognized a deferred tax asset with respect to these tax losses because we do not consider it probable that there will be suitable taxable profits in the foreseeable future based on the evidence available. As a company that carries out extensive research and development activities, we benefit from the U.K. research and development tax credit regime and are able to surrender some of our trading losses that arise from our research and development activities for a cash rebate ranging from 8.67% to 33.23% of eligible research and development expenditure. In the event we generate revenues in the future, we may benefit from the new “patent box” initiative that allows profits attributable to revenues from patents or patented products to be taxed at a lower rate than other revenue. This relief applies to profits earned from April 1, 2013 and following the transitional arrangements that will phase in the relief, the rate of tax for relevant streams of revenue for companies receiving this relief will be 10%.

### **Critical Accounting Policies and Significant Judgments and Estimates**

Our management’s discussion and analysis of our financial condition and results of operations is based on our financial statements, which we have prepared in accordance with IFRS as issued by the IASB. In the preparation of these financial statements, we are required to make judgments, estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from these estimates under different assumptions or conditions. Our estimates and assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimate is revised if the revision affects only that period or in the period of the revisions and future periods if the revision affects both current and future periods.

While our significant accounting policies are described in more detail in the notes to our financial statements appearing at the end of this Annual Report, we believe the following accounting policies to be most critical to the judgments and estimates used in the preparation of our financial statements.

### *Other Operating Income*

Other operating income is comprised of amounts received from government entities, philanthropic, nongovernment and not for profit organizations and patient advocacy groups. Because IFRS, as issued by IASB, does not provide specific accounting guidance for the treatment of amounts received from philanthropic, nongovernment and not for profit organizations and patient advocacy groups, we have applied the guidance in International Accounting Standard 8, “Accounting Policies, Changes in Accounting Estimates and Errors,” and



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## [Table of Contents](#)

we consider that such arrangements are most similar to government grants. As such, we recognize amounts received from philanthropic, non-government and not for profit organizations and patient advocacy groups and grant income from government entities as other operating income in accordance with International Accounting Standard 20, "Accounting for Government Grants and Disclosure of Government Assistance," at the same time as the underlying expenditure is incurred, provided that there is reasonable assurance that we will comply with the conditions of such awards. Under the terms of certain of our arrangements with philanthropic, nongovernment and not for profit organizations and patient advocacy groups, should we successfully commercialize our products, we have agreed to enter into certain revenue sharing agreements, under which those organizations will be entitled to a share of the cumulative net revenue that we or our affiliates receive from exploiting the relevant intellectual property or award products. We will recognize these royalties as a reduction in revenue in line with any potential future sales made by us. In addition, if we achieve certain milestones, we are obligated to make milestone payments to such organizations. We currently disclose these potential future royalty and milestone payment obligations as a contingent liability in our consolidated financial statements.

### *Recognition of Research and Development Expenses*

We recognize expenses incurred in carrying out our research and development activities in line with our best estimation of the stage of completion of each separately contracted study or activity. This includes the calculation of research and development accruals at each period to account for expenditure that has been incurred. This requires estimations of the full costs to complete each study or activity and also estimation of the current stage of completion. There have been no material adjustments to estimates based on the actual costs incurred for the periods presented. In all cases, we expense the full cost of each study or activity by the time the final study report or, where applicable, product, has been received.

We will recognize an internally-generated intangible asset arising from our development activities only when an asset is created that can be identified, it is probable that the asset created will generate future economic benefits and the development cost of the asset can be measured reliably. We have determined that regulatory approval is the earliest point at which the probable threshold for the creation of an internally generated intangible asset can be achieved. We therefore expense all research and development expenditure incurred prior to achieving regulatory approval as it is incurred. None of our product candidates have yet received regulatory approval.

### *Share-based Compensation*

We measure share options at fair value at their grant date in accordance with IFRS 2, "Stock-based Payment." We calculate the fair value of the share option using either the Black-Scholes model, or for options with performance conditions, a simulation model. We charge the fair value to the income statement over the expected vesting period. In the case of options that are issued below market value, the fair value will be higher than an option granted at market value, and we recognize a larger charge for such options in the income statement.

### *Impairments*

We review annually whether there are any indications that intangible assets have suffered any impairment. If there is any indication of impairment, then we undertake further tests to determine the potential impact on the carrying value of the assets. The recoverable amounts of cash generating units have been determined based on value-in-use calculations which will be incurred in selling the unit. These calculations require the use of estimates; the nature of the estimates used in impairment testing as of January 31, 2016 and January 31, 2015 are presented in the notes to the financial statements appearing at the end of this Annual Report.

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[Table of Contents](#)**Results of Operations****Comparison of Years Ended January 31, 2016 and 2015**

The following table summarizes the results of our operations for the years ended January 31, 2016 and 2015, together with the changes to those items:

	Year ended January 31,		Change 2016 vs. 2015	
	2016	2015	Increase/ (Decrease)	
	(in thousands, except percentages)			
Other operating income	£ 1,451	£ 2,148	£ (697)	(32.5)%
Operating expenses				
Research and development	(16,856)	(10,417)	6,439	61.8
General and administration	(4,771)	(4,442)	329	7.4
Operating loss	(20,176)	(12,711)	7,465	58.7
Finance income	30	51	(21)	(41.2)
Loss before income tax	(20,146)	(12,660)	7,486	59.1
Income tax credit	3,058	1,297	1,761	135.8
Loss for the year	<u>£(17,088)</u>	<u>£(11,363)</u>	<u>£ 5,725</u>	<u>50.4%</u>

***Other Operating Income***

Other operating income decreased by £0.7 million, or 32.5%, to £1.4 million during the year ended January 31, 2016 from £2.1 million during the year ended January 31, 2015. Income recognized as part of the Wellcome Trust Translational Award decreased by £0.4 million to £0.8 million for the year ended January 31, 2016 from £1.2 million for the year ended January 31, 2015 as a result of a lower contribution rate ascribed to Phase 2 activities as compared to Phase 1 activities under the terms of the funding agreement. As of January 31, 2016, we had an accrued income balance of £0.08 million related to cash due to be received from the Wellcome Trust, which we expect to receive within the next twelve months upon achievement of the final milestone of the Wellcome Trust Award when we deliver final reports related to the grant. Income recognized as part of the funding from Innovate UK for the DMD program decreased by £0.3 million to £0.6 million for the year ended January 31, 2016 from £0.9 million for the year ended January 31, 2015. The decrease in income is in line with the achievement of milestones to date under the funding agreement.

***Operating Expenses******Research and Development Expenses***

Research and development expenses increased by £6.4 million, or 61.8%, to £16.8 million for the year ended January 31, 2016 from £10.4 million for the year ended January 31, 2015. This increase was primarily due to increased spending related to our DMD and CDI programs. During the year ended January 31, 2016, expenses related to our DMD program increased by £2.8 million to £7.5 million from £4.7 million for the year ended January 31, 2015. This increase included £1.5 million related to our ezutromid clinical activities, £1.2 million related to research associated with our second generation utrophin modulator program and our strategic alliance with the University of Oxford, £0.3 million associated with manufacturing costs for our clinical trials, and offset by a decrease of £0.4 million related to long term toxicity studies which were performed in 2014. During the year ended January 31, 2016, expenses related to our CDI program increased by £2.3 million to £5.5 million from £3.2 million for the year ended January 31, 2015. This increase was primarily due to costs incurred related to our ongoing Phase 2 clinical trials, as well as preparatory Phase 3 clinical trial costs. During the year ended January 31, 2016, other research and development expenses increased by £1.3 million to £3.8 million from £2.5 million for the year ended January 31, 2015. This increase was due to a £1.1 million increase in staffing

## [Table of Contents](#)

costs, a £0.1 million increase in internal regulatory costs and a £0.1 million increase in the share-based payment charge allocated to research and development expenses, which resulted from increased employee headcount within our DMD and CDI program teams.

### *General and Administration Expenses*

General and administration expenses increased by £0.3 million, or 7.4%, to £4.7 million for the year ended January 31, 2016 from £4.4 million for the year ended January 31, 2015. This increase was due to an £0.7 million increase in legal and professional expenses and other costs associated with being a publicly traded company in the United States as well as in the United Kingdom, an increase of £0.4 million in staff related costs, an increase of £0.2 million in overhead and facility related costs and an increase of £0.1 million in share based payment expense offset by £0.7 million in cash infusion milestone payments made to two U.S. DMD patient groups as part of funding agreements recognized in July 2014 and £0.4 million recognized as a favorable exchange rate variance.

### *Finance Income*

Finance income decreased by £0.02 million to £0.03 million for the year ended January 31, 2016 from £0.05 million for the year ended January 31, 2015. This decrease was due to reduced bank interest received on cash deposits as a result of a lower available bank interest rate.

### *Income Tax Credit*

Our income tax credit increased by £1.8 million, or 135.8%, to £3.1 million for the year ended January 31, 2016 from £1.3 million for the year ended January 31, 2015. This increase was the result of our increased expenditure on research and development and a related increase in our research and development tax credit.

## **Comparison of Years Ended January 31, 2015 and 2014**

The following table summarizes the results of our operations for the years ended January 31, 2015 and 2014, together with the changes to those items:

	Year ended January 31,		Change 2015 vs. 2014	
	2015	2014	Increase/ (Decrease)	
	(in thousands, except percentages)			
Other operating income	£ 2,148	£ 1,844	£ 304	16.5%
Operating expenses				
Research and development	(10,417)	(6,611)	3,806	57.6
General and administration	(4,442)	(1,942)	2,500	128.7
Operating loss	(12,711)	(6,709)	6,002	89.5
Finance income	51	9	42	466.7
Loss before income tax	(12,660)	(6,700)	5,960	89.0
Income tax credit	1,297	607	690	113.7
Loss for the year	<u>£(11,363)</u>	<u>£ (6,093)</u>	<u>£ 5,270</u>	<u>86.5%</u>

### *Other Operating Income*

Other operating income increased by £0.3 million, or 16.5%, to £2.1 million during the year ended January 31, 2015 from £1.8 million during the year ended January 31, 2014. The increase in other operating income during this year was due to a £0.5 million increase in government grant income associated with funding

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## [Table of Contents](#)

received from Innovate UK as part of an up to £2.4 million grant to support the development of ezutromid for the treatment of DMD, which we were awarded in September 2013. Of the total award £1.4 million was outstanding as of January 31, 2015. The increase in government grant income was offset by a decrease in other operating income recognized from the Wellcome Trust, which decreased by £0.2 million to £1.2 million for the year ended January 31, 2015 from £1.4 million for the year ended January 31, 2014. The decrease in income recognized from the Wellcome Trust in the year ended January 31, 2015 resulted from a lower contribution rate ascribed to Phase 2 activities as compared to Phase 1 activities under the terms of the funding agreement. As of January 31, 2015, we had a deferred income balance of £0.7 million related to cash received from the Wellcome Trust.

### ***Operating Expenses***

#### *Research and Development Expenses*

Research and development expenses increased by £3.8 million, or 57.6%, to £10.4 million for the year ended January 31, 2015 from £6.6 million for the year ended January 31, 2014. This increase was primarily due to increased spending related to our DMD and CDI programs. During the year ended January 31, 2015, expenses related to our DMD program increased by £1.8 million to £4.7 million from £2.9 million for the year ended January 31, 2014. This increase included £0.8 million related to our ezutromid clinical activities, £0.6 million related to research associated with our second generation utrophin modulator program and our strategic alliance with the University of Oxford, £0.3 million associated with manufacturing costs for our clinical trials, £0.2 million related to regulatory associated costs, £0.1 million related to biomarker research activities and offset by a decrease of £0.2 million related to long term toxicity studies. During the year ended January 31, 2015, expenses related to our CDI program increased by £1.1 million to £3.2 million from £2.1 million for the year ended January 31, 2014. This increase was due to costs incurred related to our ongoing Phase 2 clinical trials. During the year ended January 31, 2015, other research and development expenses increased by £0.9 million to £2.5 million from £1.6 million for the year ended January 31, 2014. This increase was due to a £0.8 million increase in staffing costs and a £0.2 million increase in the share-based payment charge allocated to research and development expenses, which resulted from increased employee headcount within our DMD and CDI program teams. These amounts were partially offset by a reduction in other non-core program costs of £0.1 million due to the discontinuation of our in-house discovery efforts related to the development of an iminosugar technology platform.

#### *General and Administration Expenses*

General and administration expenses increased by £2.5 million, or 128.7%, to £4.4 million for the year ended January 31, 2015 from £1.9 million for the year ended January 31, 2014. This increase was due to £0.7 million in cash infusion milestone payments made to two U.S. DMD patient groups as part of funding agreements entered into with these patient groups, an increase in staff related costs of £1.0 million, an increase of £0.5 million in share based payment expense and a £0.3 million increase in legal and professional expenses.

### ***Finance Income***

Finance income increased by £0.04 million to £0.05 million for the year ended January 31, 2015 from £0.01 million for the year ended January 31, 2014. This increase was due to increased bank interest received as a result of a higher level of cash on hand.

### ***Income Tax Credit***

Our income tax credit increased by £0.7 million, or 113.7%, to £1.3 million for the year ended January 31, 2015 from £0.6 million for the year ended January 31, 2014. This increase was the result of our increased expenditure on research and development and a related increase in our research and development tax credit.

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## [Table of Contents](#)

### Liquidity and Capital Resources

#### Sources of liquidity

Since our inception, we have incurred significant operating losses. We anticipate that we will continue to incur losses for at least the next several years. We expect that our research and development and general and administration expenses will continue to increase in connection with conducting clinical trials for our lead product candidates, ezutromid for the treatment of DMD and ridinilazole for the treatment of CDI, and seeking marketing approval for ezutromid and ridinilazole in the United States and the European Union as well as other geographies. As a result, we will need additional capital to fund our operations, which we may obtain from additional financings, research funding, collaborations, contract and grant revenue or other sources. Additional capital, when needed, may not be available to us on acceptable terms, or at all.

To date, we have financed our operations primarily through the issuance of our ordinary shares and American Depositary Shares and development funding and other assistance from government entities, philanthropic, non-government and not for profit organizations and patient advocacy groups for our product candidates. In particular, we have received funding from the Wellcome Trust, Innovate UK, Joining Jack, the Muscular Dystrophy Association, Parent Project Muscular Dystrophy, Charley's Fund, Cure Duchenne, Foundation to Eradicate Duchenne and the Nash Avery Foundation.

As of January 31, 2016, we had cash and cash equivalents of £16.3 million.

In March 2014, we received net proceeds of £20.5 million from the issuance and sale of 16,923,077 ordinary shares. In March 2015, we received net proceeds of \$32.7 million (£21.9 million) from the issuance and sale of 3,967,500 American Depositary Shares which represent 19,837,500 ordinary shares.

#### Cash Flows

The following table summarizes the results of our cash flows for the years ended January 31, 2016, 2015 and 2014.

	Year ended January 31,			
	2016	2016	2015	2014
		(in thousands)		
Net cash (outflow) from operating activities	\$(24,371)	£(17,182)	£(11,325)	£(5,869)
Net cash (outflow) / inflow from investing activities	(51)	(36)	16	64
Net cash inflow from financing activities	31,398	22,136	20,544	4,456
Net increase/(decrease) in cash and cash equivalents	<u>\$ 6,976</u>	<u>£ 4,918</u>	<u>£ 9,235</u>	<u>£(1,349)</u>

#### Operating Activities

Net cash outflow from operating activities increased by £5.9 million, or 52.0%, to £17.2 million for the year ended January 31, 2016 compared to £11.3 million for the year ended January 31, 2015. This increase was driven by an increase in operating expenses and working capital requirements, offset by the receipt of a research and development tax credit that increased by £0.7 million, or 112.9%, to £1.4 million for the year ended January 31, 2016 compared to £0.7 million for the year ended January 31, 2015.

Net cash outflow from operating activities increased by £5.4 million, or 93.0%, to £11.3 million for the year ended January 31, 2015 compared to £5.9 million for the year ended January 31, 2014. This increase was primarily due to a £3.6 million increase in total research and development expenses and an increase in general and administration expenses of £2.0 million (excluding non-cash share-based payment charges), partially offset by an increase of £0.3 million in research and development tax receipts.

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## [Table of Contents](#)

### *Investing Activities*

Net cash outflow for the year ended January 31, 2016 and net cash inflows for the years ended January 31, 2015 and 2014 include the net amount of bank interest received on cash deposits less amounts paid to acquire property and equipment.

### *Financing Activities*

Net cash inflow from financing activities in all periods presented relates to the proceeds received from the various sales of our equity securities, net of expenses. We received £22.1 million from the sale of equity securities during the year ended January 31, 2016, £20.5 million from the sale of equity securities during the year ended January 31, 2015 and £4.5 million from the sale of equity securities during the year ended January 31, 2014.

### **Funding Requirements**

We anticipate that our expenses will increase substantially in connection with conducting clinical trials for our lead product candidates, ezutromid for the treatment of patients with DMD and ridinilazole for the treatment of patients with CDI, and seeking marketing approval for ezutromid and ridinilazole in the United States and the European Union as well as in other geographies. In addition, if we obtain marketing approval of ezutromid or ridinilazole, we expect to incur significant sales, marketing, distribution and outsourced manufacturing expense, as well as ongoing research and development expenses.

In addition, our expenses will increase if and as we:

- continue the research and development of a potential optimized formulation of ezutromid, internally developed second generation utrophin modulators, and future generation modulators that we are developing in collaboration with the University of Oxford;
- seek to identify and develop additional future product candidates;
- seek marketing approvals for any product candidates that successfully complete clinical development;
- ultimately establish a sales, marketing and distribution infrastructure and scale up external manufacturing capabilities to commercialize any product candidates for which we receive marketing approval;
- acquire or in-license other product candidates and technology;
- maintain, expand and protect our intellectual property portfolio;
- hire additional clinical, regulatory and scientific personnel;
- expand our physical presence in the United States; and
- add operational, financial and management information systems and personnel, including personnel to support our product development and planned future commercialization efforts.

Because of our need to raise additional capital to continue to fund our future operations, the significant losses and negative cash flows from operations that we have incurred since inception, and our accumulated deficit and limited cash resources, our independent registered public accounting firm has included an explanatory paragraph in its report on our financial statements for the year ended January 31, 2016, about our ability to continue as a going concern.

We believe that our existing cash and cash equivalents will be sufficient to enable us to fund our operating expenses and capital expenditure requirements for our major programs through the end of our fiscal year ending January 31, 2017. We estimate these capital resources will be sufficient to enable us to report the first set of 24-week muscle biopsy data from the first group of patients from our PhaseOut DMD clinical trial which is expected

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## [Table of Contents](#)

in January 2017, complete and report top line data from our Phase 1 clinical trial evaluating a potential optimized formulation of ezutromid which we expect to report in the third quarter of 2016, and complete and report top line data from our exploratory clinical trial of ridinilazole compared to fidaxomicin which we expect to report in the second half of 2016. We do not expect our existing capital resources will allow us to complete our PhaseOut DMD clinical trial.

We have based the foregoing estimate on assumptions that may prove to be wrong, and we could use our capital resources sooner than we currently expect. This estimate assumes, among other things, that we do not obtain any additional funding through grants and clinical trial support or through new collaboration arrangements. Our future capital requirements will depend on many factors, including:

- the progress, costs and results of clinical trials of ezutromid for DMD and ridinilazole for CDI;
- the scope, progress, costs and results of preclinical development, laboratory testing and clinical trials for our potential optimized formulation of ezutromid, internally developed second generation utrophin modulators, and future generation utrophin modulators that we are developing in collaboration with the University of Oxford;
- the number and development requirements of other future product candidates that we pursue;
- the costs, timing and outcome of regulatory review of ezutromid, ridinilazole and our other future product candidates;
- the costs and timing of commercialization activities, including product sales, marketing, distribution and manufacturing, for any of our product candidates that receive marketing approval;
- subject to receipt of marketing approval, revenue received from commercial sales of ezutromid, ridinilazole or any of our other future product candidates;
- the costs and timing of preparing, filing and prosecuting patent applications, maintaining, enforcing and protecting our intellectual property rights and defending against any intellectual property-related claims;
- our ability to establish and maintain collaborations, licensing or other arrangements and the financial terms of such arrangements;
- the extent to which we acquire or invest in other businesses, products and technologies;
- the rate of the expansion of our physical presence in the United States; and
- the costs of operating as a public company in the United States in addition to in the United Kingdom.

Until such time, if ever, as we can generate substantial product revenues, we expect to finance our cash needs through a combination of equity offerings, collaborations, strategic alliances, grants and clinical trial support from governmental entities and philanthropic, non-government and not for profit organizations and patient advocacy groups, debt financings, and marketing, distribution or licensing arrangements. We do not have any committed external source of funds other than £0.1 million in funding that we are eligible to receive under our award funding agreement with the Wellcome Trust and £0.6 million of funding that we are eligible to receive under our agreement with Innovate UK, in each case subject to satisfying specified criteria. To the extent that we raise additional capital through the sale of equity or convertible debt securities, the ownership interest of our existing shareholders, including our ADS holders, will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect the rights of our existing shareholders and ADS holders. Debt financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends or other distributions. If we raise additional funds through collaborations, strategic alliances or marketing, distribution or licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs or product candidates or to grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds through equity or debt financings or other

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## [Table of Contents](#)

arrangements when needed, we may be required to delay, limit, reduce or terminate our product development or future commercialization efforts or grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves.

### Tabular Disclosure of Contractual Obligations

The following table summarizes our contractual commitments and obligations as of January 31, 2016.

	Total	Payments due by period			
		Less than 1 Year	Between 1 and 3 Years	Between 3 and 5 Years	More than 5 Years
Operating lease obligations	£ 291	£ 97	£ 194	£ —	—
Contractual obligations	3,113	830	1,660	623	—
Total contractual cash obligations	<u>£3,404</u>	<u>£ 927</u>	<u>£ 1,854</u>	<u>£ 623</u>	<u>—</u>

We enter into operating leases in the normal course of our business.

The contractual obligations in the preceding table reflect our obligation to fund a drug research and discovery program in the University of Oxford laboratories that is described in more detail under “University of Oxford” below.

Under various agreements, including those described below, we will be required to pay royalties and make milestone payments to third parties. See “Business—Our Collaborations and Funding Arrangements” in this Annual Report for additional information regarding these agreements. The preceding table excludes contingent payment obligations, such as royalties and milestones, which are described in more detail below, because the amount, timing and likelihood of payment are not known.

#### *University of Oxford*

In November 2013, we acquired all of the outstanding equity of MuOx Limited, or MuOx, a spin out of the University of Oxford. In connection with that acquisition, we and MuOx entered into a set of agreements with the University of Oxford and its technology transfer division, Isis Innovation Limited, or Isis. Under the research sponsorship agreement that we entered into with the University of Oxford and Isis in November 2013, amended and restated in July 2014 and amended in November 2015, we have agreed to fund a drug research and discovery program in the University of Oxford laboratories to identify and research utrophin modulators to treat DMD. The University of Oxford is responsible for conducting this program. Isis has no obligations under the research sponsorship agreement. We have agreed to fund up to £4.3 million for this purpose over the initial six-year research period ending in November 2019. If we exercise our right to extend the research period by an additional year, we have agreed to fund an additional £0.8 million, for a total of £5.2 million. As of January 31, 2016, we had paid to the University of Oxford £1.2 million of this amount. Under an option agreement that we, the University of Oxford and Isis entered into in November 2013, which we amended in November 2015, which we refer to as the option agreement, Isis granted us an exclusive option to license certain intellectual property, or IP, arising under the research sponsorship agreement and certain other IP arising from research and development at the University of Oxford, which we refer to as arising IP. We paid Isis £10,000 in connection with entering into the amendment to the option agreement. If we exercise our option to obtain a license under arising IP, we would be obligated to pay Isis a specified sum in option exercise fees. For any arising IP for which we have exercised the option and that comprises new chemical entities or compounds, which we refer to as optioned compounds, we would obtain an exclusive, sublicensable license. We are obligated to pay milestone payments of up to £75,000 upon the achievement of specified development milestones, whether such milestones occur prior to or after our exercise of the option to obtain an exclusive sublicensable license. Following exercise of such an option we



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## [Table of Contents](#)

would also be obligated to pay milestone payments upon the achievement of specified regulatory milestones with respect to each optioned compound. The specified regulatory milestone payment is due each time the specified regulatory milestone is achieved with respect to an optioned compound and, if each optioned compound achieved each regulatory milestone once, we would be obligated to pay Isis a total of £3.7 million in regulatory milestone payments for each optioned compound.

We would also be obligated to pay Isis a low single digit royalty of net sales by us, our affiliates or sublicensees of any product containing an optioned compound or on any payments we receive in connection with granting a sublicense under the licensed arising IP. For any arising IP for which we have exercised the option and that does not comprise new chemical entities or compounds, we would obtain an exclusive license, which we could sublicense with Isis' prior written consent. We and Isis would negotiate the milestone payments and any other payments that we would be obligated to pay to Isis with respect to such IP.

### ***Wellcome Trust***

In October 2012, we entered into a translation award funding agreement with The Wellcome Trust Limited, as trustee of the Wellcome Trust, to support a Phase 1 and a Phase 2 clinical trial of ridinilazole for the treatment of CDI. We refer to the translation award funding agreement as the translation award agreement. We refer to any compound or product that is covered by IP rights created under the translation award agreement or our prior agreement with the Wellcome Trust, or that is covered by IP rights to which we had rights prior to October 2009 and that relate to the activities under our agreements with the Wellcome Trust, as the award products. Under the terms of a related revenue sharing agreement that we would enter into with the Wellcome Trust to permit our development and commercialization of the award products, the Wellcome Trust is entitled to receive a tiered portion of the net revenue, ranging from a mid-single digit percentage up to a mid-twenties percentage, that we or our affiliates receive from our development and commercialization of the award products and the related IP. In addition, we would be obligated to pay the Wellcome Trust a milestone in a specified amount if cumulative net revenue exceeds a specified amount.

### ***University College London***

On March 23, 2010, we entered into a collaborative research agreement with the School of Pharmacy, University of London which was later novated on November 28, 2011 by the School of Pharmacy to University College London. As part of this agreement, and in consideration of their role in the development of the initial compound series from which ridinilazole was later identified, we agreed to pay the School of Pharmacy (now University College London) a low single-digit share of all revenue received by us in respect of ridinilazole, including any pre-commercial licensing revenue, up to a maximum of £1.0 million.

### ***U.S. Not for Profit Organizations***

#### ***Muscular Dystrophy Association***

In December 2011, we entered into a grant agreement with the Muscular Dystrophy Association, Inc., or MDA, to partially fund a Phase 1 clinical trial of ezutromid to treat DMD. Under the terms of the grant agreement, we have agreed to make specified milestone payments to MDA during our or our affiliates' development and commercialization of pharmaceutical products containing the small molecules that can upregulate the utrophin gene, including ezutromid and compounds to which we have rights, which we refer to as the project products. Because we raised more than a specified aggregate amount of funding, we paid a specified sum to MDA under the terms of the agreement, which we refer to as the MDA cash infusion milestone payment. We have also agreed to pay MDA a specified lump sum amount, less any previously paid MDA cash infusion milestone payment, following the regulatory approval of any project product for use or sale in the United States or European Union in the treatment of DMD or Becker muscular dystrophy, or BMD, and an additional specified sum upon achievement of a commercial milestone. We would be obligated to pay MDA a low single digit

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## [Table of Contents](#)

percentage royalty of worldwide net sales by us, our affiliates or licensees of any project product. If we assign our rights to any of the compounds subject to the grant agreement or experience specified change in control events, MDA may require our assignee to assume our obligations under the MDA grant agreement with respect to the assigned rights, or require us to pay MDA the greater of a low single digit percentage of the fair market value of the assigned rights, or an amount that would give MDA an internal rate of return of a low double digit percentage on its grant to us.

### *Duchenne Partners Fund*

In December 2011, we entered into a grant agreement with the Duchenne Partners Fund, Inc., or DPF, to partially fund a Phase 1 clinical trial of ezutromid to treat DMD. Under the DPF grant agreement, we have agreed to make specified milestone payments to DPF during our or our affiliates' development and commercialization of pharmaceutical products containing the small molecules that can upregulate the utrophin gene, including ezutromid and compounds with similar mechanisms of action to which we have rights, which we refer to as project products. Because we raised more than a specified aggregate amount of funding, we paid a specified sum to DPF under the terms of the agreement, which we refer to as the DPF cash infusion milestone payment.

We have also agreed to pay DPF a specified lump sum amount, less any previously paid DPF cash infusion milestone payment, following the regulatory approval of any project product for use or sale in the United States or European Union in the treatment of DMD or BMD and an additional specified sum upon achievement of a commercial milestone. We would be obligated to pay DPF a low single digit percentage royalty of worldwide net sales by us, our affiliates or licensees of any project product. If we assign our rights to any of the compounds subject to the DPF Grant Agreement or experience specified change in control events, DPF may require our assignee to assume our obligations under the DPF grant agreement with respect to the assigned rights, or require us to pay DPF the greater of a low single digit percentage of the fair market value of the assigned rights, or an amount that would give DPF an internal rate of return of a low double digit percentage on its grant to us.

The total amount payable with respect to regulatory milestones under the U.S. not for profit organization agreements would be \$2.5 million if we meet all regulatory milestones.

### *Other Contracts*

In addition, we enter into contracts in the normal course of business with contract research organizations to assist in the performance of our research and development activities and other services and products for operating purposes. These contracts generally provide for termination on notice, and therefore are cancellable contracts and not included in the table of contractual obligations and commitments.

### **Off-Balance Sheet Arrangements**

We do not have any, and during the periods presented we did not have any, off-balance sheet arrangements, other than the contractual obligations and commitments described above.

### **Jumpstart Our Business Startups Act of 2012**

As a company with less than \$1 billion in revenue during our last fiscal year, we qualify as an "emerging growth company" as defined in the Jumpstart our Business Startups Act of 2012, or the JOBS Act. An emerging growth company may take advantage of specified reduced reporting and other burdens that are otherwise applicable generally to public companies. These provisions include:

- an exemption from compliance with the auditor attestation requirement on the effectiveness of our internal controls over financial reporting;

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## [Table of Contents](#)

- an exemption from compliance with any requirement that the Public Company Accounting Oversight Board may adopt regarding mandatory audit firm rotation or a supplement to the auditor's report providing additional information about the audit and the financial statements;
- reduced disclosure about the company's executive compensation arrangements; and
- exemptions from the requirements to obtain a non-binding advisory vote on executive compensation or a shareholder approval of any golden parachute arrangements

We may take advantage of these provisions until January 31, 2021 or such earlier time that we are no longer an emerging growth company. We would cease to be an emerging growth company if we have more than \$1 billion in annual revenues, have more than \$700 million in market value of our share capital held by non-affiliates or issue more than \$1 billion of non-convertible debt over a three-year period. We may choose to take advantage of some, but not all, of the available benefits under the JOBS Act. We have taken advantage of some reduced reporting burdens in this Annual Report. Accordingly, the information contained herein may be different than the information you receive from other public companies in which you hold stock.

In addition, the JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. This provision allows an emerging growth company to delay the adoption of some accounting standards until those standards would otherwise apply to private companies. We have irrevocably elected not to avail ourselves of delayed adoption of new or revised accounting standards and, therefore, we will be subject to the same requirements to adopt new or revised accounting standards as other public companies that are not emerging growth companies.

### **Item 6: Directors, Senior Management and Employees**

#### **A. Directors and Senior Management**

The following table sets forth the names, ages and positions of our executive officers, key employees and directors as of the date of this Annual Report:

<u>Name</u>	<u>Age</u>	<u>Position</u>
<i>Executive Officers</i>		
Glyn Edwards	60	Chief Executive Officer, Executive Director
Erik Ostrowski	43	Chief Financial Officer
<i>Key Employees</i>		
Ralf Roskamp	63	Chief Medical Officer
Jonathon Tinsley	57	Chief Scientific Officer, DMD
Richard Vickers	40	Chief Scientific Officer, Antimicrobials
<i>Non-Employee Directors</i>		
Frank Armstrong <sup>(2)(3)(4)</sup>	59	Non-Executive Chairman
Barry Price <sup>(1)(3)(4)</sup>	72	Non-Executive Director
Stephen Davies <sup>(2)(3)(4)</sup>	66	Non-Executive Director
Leopoldo Zambeletti <sup>(3)(4)</sup>	47	Non-Executive Director
Valerie Andrews <sup>(1)(2)(3)(4)</sup>	56	Non-Executive Director
David Wurzer <sup>(1)(3)(4)</sup>	57	Non-Executive Director

(1) Member of the Audit Committee.

(2) Member of the Remuneration Committee.

(3) Member of the Nominating and Corporate Governance Committee.

(4) An "independent director" as such term is defined in Rule 10A-3 under the Exchange Act.

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## [Table of Contents](#)

### **Executive Officers**

*Glyn Edwards* has served as our Chief Executive Officer and a member of our board of directors since April 2012. Prior to joining our company, Mr. Edwards served as interim Chief Executive Officer of the BioIndustry Association, a U.K. trade organization, from November 2011 to June 2012, and Chief Executive Officer at Antisoma plc, a publicly traded biotechnology company specializing in the development of novel drugs for the treatment of cancer, from 1998 to 2011. Mr. Edwards also previously served as Vice President of Business Development at Therapeutic Antibodies Ltd. Mr. Edwards received a BSc in Biochemistry from Bristol University and a MSc in Economics from the London Business School. We believe that Mr. Edwards is qualified to serve as a member of our board of directors because of his extensive executive leadership and business development experiences in the life sciences industry.

*Erik Ostrowski* has served as our Chief Financial Officer since June 2014. Prior to joining our company, Mr. Ostrowski served as Vice President of Finance at Organogenesis Inc., a biotechnology company, from 2010 to 2014. Prior to that, Mr. Ostrowski worked in investment banking, most recently as a Director with Leerink Partners LLC. Mr. Ostrowski began his career as an accountant with Coopers & Lybrand. Mr. Ostrowski received a BS in Accounting and Economics from Babson College and an MBA from the University of Chicago Booth School of Business.

### **Key Employees**

*Ralf Roskamp* has served as our Chief Medical Officer since September 2015. Prior to joining our company, Dr. Roskamp served as Vice President, Global Clinical Development at NPS Pharmaceuticals from July 2013 to May 2015, which was subsequently acquired by Shire Pharmaceuticals. Prior to that, Dr. Roskamp was Executive Vice President, Research and Development, at Ikaria, Inc., a biotherapeutics company from 2007 to 2010. Dr. Roskamp has also served as Executive Vice President, R&D of Kos Pharmaceuticals (acquired by Abbott Labs), Vice President, Global Therapeutic Area Endocrinology, Metabolism, Rheumatology and Bone at Aventis Pharmaceuticals and Head, Clinical Research — Metabolism and Global Clinical Director, Recombinant Products at Hoechst AG. In his academic career, Dr. Roskamp served as Associate Professor, Pediatric Endocrinology in the Department of Pediatrics at the University of Bonn. He received an M.D. from the University of Bonn and is a board-certified pediatrician in Germany.

*Jonathon Tinsley* joined our company in April 2005 and has served as our Chief Scientific Officer, DMD, since October 2013. During his time with our company, Dr. Tinsley has overseen the development of our utrophin modulation program for the treatment of DMD from early discovery through to patient clinical trials. Dr. Tinsley previously worked in the laboratories of Professor Kay Davies at the University of Oxford. He is the co-author of over 35 peer reviewed scientific publications related to utrophin biology and the co-inventor on a number of patents related to utrophin biology. Prior to joining our company, Dr. Tinsley was the Head of Biology at Oxagen Plc and a Senior Research Fellow at the Medical Research Council. Dr. Tinsley received a Ph.D. in cancer studies from the University of Birmingham and a B.Sc. in microbiology from the University of Leeds.

*Richard Vickers* joined our company in 2003 and has served as our Chief Scientific Officer, Antimicrobials, since October 2013. During his time at our company, Dr. Vickers has worked in a variety of roles involved in the development and management of various antibacterial therapeutic programs, including our antibiotic program for the treatment of CDI. Prior to joining our company, Dr. Vickers undertook postdoctoral research studies with Professor Stephen Davies at the University of Oxford and held a Stipendiary Lectureship in organic chemistry at St. Catherine's College in Oxford. Dr. Vickers received a Ph.D. in organic chemistry from the University of Reading and a B.Sc. in chemistry from King's College London.

### **Non-Employee Directors**

*Frank Armstrong* has served as a member of our board of directors since November 2012 and Non-Executive Chairman since June 2013. Dr. Armstrong is currently President of Dr Frank M Armstrong Consulting Limited, a position he has held since 2012. Prior to this, Dr. Armstrong led Medical Science and

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## [Table of Contents](#)

Innovation at Merck Serono, the biopharmaceutical division of Merck KGaA, from 2010 to 2011. Dr. Armstrong was also Head of Worldwide Product Development at Bayer AG from 1998 to 2001 and held various positions at ICI plc and Zeneca plc, now AstraZeneca plc, from 1985 to 1998. Dr. Armstrong has served as the Chief Executive Officer at five biotechnology companies, including Fulcrum Pharma, which is listed on AIM, CuraGen, a NASDAQ-listed company that was acquired by Celldex Therapeutics, Inc., Bioaccelerate, Provensis and Phoqus. Dr. Armstrong is the Non-Executive Chairman of Xceleron Ltd, Redx Pharma plc, Faron Pharmaceuticals and Caldan Therapeutics Ltd; a Non-Executive Director of Juniper Pharmaceuticals Inc. (formerly Columbia Laboratories Inc.), which is listed on NASDAQ, and Mereo Biopharma Group Ltd.; and a Member of the Strategic Advisory Board of HealthCare Royalty Partners. Dr. Armstrong received an honors degree in Biochemistry and an MBChB(MD) in Medicine from the University of Edinburgh in Scotland. He is a Fellow of the Royal College of Physicians, Edinburgh and a Fellow of the Faculty of Pharmaceutical Physicians. We believe that Dr. Armstrong is qualified to serve on our board of directors because of his extensive experience in the biotechnology industry and his medical background.

*Barry Price* has served as a member of our board of directors since September 2006. Dr. Price spent 28 years with the Glaxo Group of companies, where he held several executive positions including, Managing Director of Glaxochem Ltd. from 1993 to 1995 and Research Director of Glaxo Group Research from 1989 to 1993. Dr. Price also served as a Non-Executive Director of Shire plc, a biopharmaceutical company that is listed on the London Stock Exchange and NASDAQ, from 1996 to 2009, during which time he was involved in developing the company into one of the U.K.'s largest life sciences companies. Dr. Price has previously held directorships at Chiroscience plc, Celltech Group plc, Pharmagene plc, Antisoma plc, and BioWisdom Ltd. Dr. Price received a BSc in chemistry and a PhD in chemistry from the University of Sheffield, and he is a Fellow of the Royal Society of Chemistry. We believe Dr. Price is qualified to serve on our board of directors because of his extensive experience in the pharmaceutical and life sciences industries.

*Stephen Davies* has served as a member of our board of directors since November 2013 and previously served as a member of our board of directors from 2004 to February 2013. Professor Davies has been a professor at the University of Oxford since 1996 and was appointed Waynflete Professor of Organic Chemistry and Fellow of Magdalen College in 2006. Professor Davies' areas of expertise include medicinal and asymmetric chemistry. He has published extensively and received numerous awards in his field. Professor Davies co-founded our company, as well as other University of Oxford spin-out companies. He was the founder and Non-Executive Chairman of MuOx Limited and OxRay Ltd and Non-Executive Chairman of Scientific Research Capital Ltd.; is a founder and Non-Executive Director of OxStem Ltd. and OxStem Oncology Ltd.; and is a Non-Executive Director of Isis Innovation Ltd. Professor Davies received a BA in Chemistry from the University of Oxford, a D.Phil in Organic Chemistry from the University of Oxford, and a D.Sc. in Organic Chemistry from the University of Paris. We believe Professor Davies is qualified to serve on our board of directors because of his extensive experience as an academic and entrepreneur in the biopharmaceutical industry.

*Leopoldo Zambelletti* has served as a member of our board of directors since May 2014. Mr. Zambelletti has served as an independent strategic advisor to life sciences companies since 2013, focusing on mergers and acquisitions, out-licensing deals and financing strategy. Prior to this, Mr. Zambelletti worked in investment banking for 19 years, during which time he led the European Healthcare Investment teams at JP Morgan and at Credit Suisse. He is a Non-Executive Director of Nogra Pharma Ltd., an Irish biotechnology company, and of Advanced Accelerator Applications, a Swiss nuclear diagnostics and therapeutics company. Mr. Zambelletti began his career as an accountant at KPMG. He received his degree in Business Administration from Bocconi University. We believe Mr. Zambelletti is qualified to serve on our board of directors because of his extensive experience in the finance and life sciences industries.

*Valerie Andrews* has served as a member of our board of directors since September 2014. Most recently, Ms. Andrews served from May 2011 until May 2014 as General Counsel at Vertex Pharmaceuticals Incorporated, a biopharmaceutical company focused on small molecule therapies for cystic fibrosis and other

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[Table of Contents](#)

indications. From 2002 to May 2011, Ms. Andrews served in various legal roles at Vertex, including as Deputy General Counsel and Chief Compliance Officer. Prior to joining Vertex, Ms. Andrews was the Executive Director of Licensing for Massachusetts General Hospital and Brigham and Women's Hospital from September 2001 to March 2002. From 1989 to 2001, Ms. Andrews served as a corporate lawyer at Hill & Barlow PC, where she became a partner in 1997. In her professional roles, Ms. Andrews has garnered expertise in areas including corporate strategy, strategic transactions, corporate governance, executive compensation, risk management, and compliance. Ms. Andrews served as a Non-Executive Director of Juniper Pharmaceuticals Inc. (formerly Columbia Laboratories) from 2005 until 2015. Ms. Andrews received a BA in Chemistry and Psychology from Duke University and a JD from Boston College. We believe Ms. Andrews is qualified to serve on our board of directors because of her extensive skills in business and legal matters related to the pharmaceuticals industry.

*David M. Wurzer* has served as a member of our board of directors since February 2015. Mr. Wurzer is currently the Executive Vice President and Chief Investment Officer at Connecticut Innovations, a state-funded venture capital fund, where he previously served as Senior Managing Director and Managing Director. Prior to joining Connecticut Innovations in November 2009, Mr. Wurzer served as Executive Vice President, Treasurer and Chief Financial Officer at CuraGen Corporation from 1997 to 2008. He also held numerous positions at Value Health Inc. from 1991 to 1997, including Senior Vice President, Treasurer and Chief Financial Officer. Mr. Wurzer is a Non-Executive Director of Special Diversified Opportunities, Inc., Thetis Pharmaceutical LLC and Axerion Therapeutics, Inc.; from 2010 to 2012 he was a Non-Executive Director of DUSA Pharmaceuticals and from 2010 to 2015 he was a Non-Executive Director of Response Genetics. Mr. Wurzer is a Certified Public Accountant and began his career with Coopers & Lybrand, which is now part of PricewaterhouseCoopers. He received a B.B.A. from the University of Notre Dame. We believe Mr. Wurzer is qualified to serve on our board of directors because of his extensive experience in the pharmaceutical and biotechnology industries and his finance and accounting background.

**B. Compensation**

The following discussion provides the amount of compensation paid, and benefits in kind granted, by us and our subsidiaries to our current directors and executive officers for services provided in all capacities to us or our subsidiaries for the year ended January 31, 2016, as well as the amount contributed by us into money purchase plans for the year ended January 31, 2016 to provide pension benefits to our current directors and executive officers.

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[Table of Contents](#)**Directors' and Executive Management Compensation**

For the year ended January 31, 2016, the table below sets out the compensation paid to our current directors and executive officers.

**Compensation for Year Ended January 31, 2016 for Current Directors and Executive Management**

Name	Salary/ Fees £	Taxable Benefits <sup>1</sup> £	Pension Benefit £	Total £
Glyn Edwards <i>Chief Executive Officer and Executive Director</i>	£345,000	£ 1,076	£12,267	£358,343
Erik Ostrowski <i>Chief Financial Officer</i>	\$540,000	—	\$20,400	\$560,400
Frank Armstrong <sup>2</sup> <i>Non-Executive Chairman</i>	£ 59,167	£ 918	—	£ 60,085
Barry Price <i>Non-Executive Director</i>	£ 25,000	£ 1,633	—	£ 28,633
Stephen Davies <i>Non-Executive Director</i>	£ 29,310	—	—	£ 29,310
Leopoldo Zambelletti <i>Non-Executive Director</i>	£ 29,310	£ 189	—	£ 29,499
Valerie Andrews <i>Non-Executive Director</i>	£ 34,459	£ 4,107	—	£ 38,566
David Wurzer <sup>3</sup> <i>Non-Executive Director</i>	£ 33,153	—	—	£ 33,153

- (1) Taxable benefits represent the value of the personal benefits granted, which include private medical insurance and life assurance for executive officers and travel costs (and associated income tax and national insurance contributions which were settled on behalf of the Non-Executive Directors) for attendance at board meetings for the Non-Executive Directors. Amounts included are based on the taxable benefits reported in the year ended January 31, 2016 to HM Revenue & Customs.
- (2) We paid £40,845 to Dr. Armstrong directly and £18,322 to Dr Frank M Armstrong Consulting Limited, a company controlled by Dr. Armstrong.
- (3) Mr. Wurzer was appointed to our board of directors on February 20, 2015.

Total compensation set out in the table above does not include any amounts for the value of options to acquire our ordinary shares granted to or held by the directors and executive management, which is described in "Compensation—Outstanding Equity Awards, Grants and Option Exercise" in this Annual Report.

**Bonuses**

Our Executive Director and Chief Financial Officer are eligible for annual bonuses at the discretion of our board and, in the case of our Executive Director, our remuneration committee. Annual bonuses are based on achievement of strategic and financial measures and personal performance objectives. Our Executive Director is eligible for annual bonus potential of 100% of his gross base salary to be paid in share options, cash or a combination of both at the discretion of our board. On January 21, 2016, our Executive Director was awarded a bonus representing 100% of his gross basic salary, of which 50% was paid in cash. The remaining bonus is due to be awarded as options. Mr. Ostrowski, our Chief Financial Officer, is eligible for a discretionary annual bonus in an amount up to 40% of his annual base salary, as determined by our board of directors. On January 21, 2016, Mr. Ostrowski was awarded a bonus representing 50% of his annual base salary. The bonus was paid in cash.

[Table of Contents](#)

**Outstanding Equity Awards, Grants and Option Exercise**

During the year ended January 31, 2016, options to purchase 1,462,333 ordinary shares were awarded to our current directors and executive officers. The table below sets out information on outstanding options granted to our current directors and executive officers as of January 31, 2016.

**Outstanding Options As of January 31, 2016 for Current Directors and Executive Management**

Name	Date of grant	At February 1, 2015	Granted during the period	Lapsed during the period	At January 31, 2016	Price per share (£)	Date from which exercisable	Expiration date
Glyn Edwards <i>Chief Executive Officer and Executive Director</i>	May 10, 2012	227,500	—	(77,454)	150,406	0.60	Note 1	May 10, 2022
	May 10, 2012	657,500	—	—	657,500	0.60	Note 2	May 10, 2022
	January 31, 2013	72,973	—	—	72,973	0.20	Note 3	January 31, 2023
	December 18, 2013	300,000	—	—	300,000	1.85	Note 4	December 18, 2023
	December 18, 2013	76,364	—	—	76,364	0.20	Note 5	December 18, 2023
	July 15, 2014	600,000	—	—	600,000	1.26	Note 6	July 15, 2024
	June 16, 2015	—	887,333	—	887,333	1.43	Note 11	June 16, 2025
		<u>1,934,337</u>	<u>887,333</u>	<u>(77,454)</u>	<u>2,744,216</u>			
Erik Ostrowski <i>Chief Financial Officer</i>	June 23, 2014	400,000	—	—	400,000	1.48	Note 7	June 23, 2024
	June 16, 2015	—	400,000	—	400,000	1.43	Note 11	June 16, 2025
		<u>400,000</u>	<u>400,000</u>	<u>—</u>	<u>800,000</u>			
Barry Price <i>Non-Executive Director</i>	April 7, 2011	13,981	—	—	13,981	0.65	Note 8	April 7, 2021
	December 18, 2013	25,000	—	—	25,000	1.85	Note 4	December 18, 2023
	July 15, 2014	25,000	—	—	25,000	1.26	Note 6	July 15, 2024
	June 16, 2015	—	25,000	—	25,000	1.43	Note 11	June 16, 2025
			<u>63,981</u>	<u>25,000</u>	<u>—</u>	<u>88,981</u>		
Frank Armstrong <i>Non-Executive Director</i>	December 18, 2013	75,000	—	—	75,000	1.85	Note 4	December 18, 2023
	July 15, 2014	37,500	—	—	37,500	1.26	Note 6	July 15, 2024
	June 16, 2015	—	50,000	—	25,000	1.43	Note 11	June 16, 2025
			<u>112,500</u>	<u>50,000</u>	<u>—</u>	<u>162,500</u>		
Stephen Davies <i>Non-Executive Director</i>	December 18, 2013	25,000	—	—	25,000	1.85	Note 4	December 18, 2023
	July 15, 2014	25,000	—	—	25,000	1.26	Note 6	July 15, 2024
	June 16, 2015	—	25,000	—	25,000	1.43	Note 11	June 16, 2025
			<u>50,000</u>	<u>25,000</u>	<u>—</u>	<u>75,000</u>		
Leopoldo Zambelletti <i>Non-Executive Director</i>	June 23, 2014	25,000	—	—	25,000	1.48	Note 9	June 23, 2024
	June 16, 2015	—	25,000	—	25,000	1.43	Note 11	June 16, 2025
			<u>25,000</u>	<u>25,000</u>	<u>—</u>	<u>50,000</u>		
Valerie Andrews <i>Non-Executive Director</i>	December 23, 2014	25,000	—	—	25,000	1.37	Note 10	December 23, 2024
	June 16, 2015	—	25,000	—	25,000	1.43	Note 11	June 16, 2025
			<u>25,000</u>	<u>25,000</u>	<u>—</u>	<u>50,000</u>		
David Wurzer <i>Non-Executive Director</i>	June 16, 2015	—	25,000	—	25,000	1.43	Note 11	June 16, 2025
			<u>—</u>	<u>25,000</u>	<u>—</u>	<u>25,000</u>		

<sup>1</sup> These options were eligible for full vesting and exercise on and after May 10, 2015, subject to the meeting of performance conditions relating to our ordinary share price. In order to vest in full, the average closing share price of our ordinary shares on AIM needed to be equal to or greater than £2.20 for the two months preceding the third anniversary of the date of the grant, 25% would vest where the average closing share price is £1.40 and pro-rated where the average closing share price is between £1.41 and £2.19. The options will lapse if the performance condition relating to our average closing share price is not met by the third anniversary of the date of grant. The performance period has now passed and, accordingly, only 150,046 options have vested and 77,454 options have lapsed.



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## [Table of Contents](#)

- 2 The options are split into four tranches with varying performance conditions attached and will only vest if the average closing share price of our ordinary shares on AIM is equal or greater than the specified condition in any period of 60 consecutive calendar days, ending on or before the fifth anniversary of the date of grant. Details of the tranches are as follows: 207,500 with a performance condition based on an average closing share price of £4.00; 200,000 with a performance condition based on an average closing share price of £6.00; 150,000 with a performance condition based on an average closing share price of £8.00; and 100,000 with a performance condition based on an average closing share price of £10.00. The options will lapse if the performance condition is not met by the fifth anniversary of the date of grant.
- 3 These options were awarded under our bonus incentive. They vested and became exercisable on July 31, 2013.
- 4 These options vest in full subject to (i) completion of Phase 2 proof of concept trials in both the Duchenne muscular dystrophy and *Clostridium difficile* infection programs or the third anniversary of the date of the grant, whichever is sooner and (ii) the average closing share price of our ordinary shares on AIM being equal or greater than £2.775 in any period of 30 consecutive days ending on or before the third anniversary of the date of grant.
- 5 These options vested and became exercisable on June 18, 2014. These options were awarded as a bonus for the fiscal year ended January 31, 2014 representing 70% of Mr. Edwards' gross basic salary for such fiscal year.
- 6 These options will vest if the average closing share price of our ordinary shares on AIM is equal to or greater than £1.89 in any period of 30 consecutive days during the period from the date of the grant to the third anniversary of the date of the grant. Once vested, 25% of the options can be exercised on or after the second anniversary of the date of grant and all of the options, if vested, can be exercised on or after the third anniversary of the date of grant. These options will lapse if the performance condition relating to our average closing share price is not met by the third anniversary of the date of the grant.
- 7 These options vest and become exercisable in the following proportions, assuming the average closing share price of our ordinary shares on AIM during the two months prior to each relevant vesting date is £2.213 or higher: 25% on the second anniversary of the date of grant, 75% on the third anniversary of the date of grant and 100% on the fourth anniversary of the date of grant. These options will lapse if the performance condition is not met by the fourth anniversary of the date of grant.
- 8 These options were capable of vesting and exercise on or after April 8, 2014 subject to the meeting of performance conditions relating to our share price. In order to vest in full, the average closing share price of our ordinary shares on AIM would have had to exceed £3.00 over the two months ending April 7, 2014. If the performance conditions were not satisfied in full, or in part, the options would lapse in respect of those option shares that did not vest. The performance period has now passed and, accordingly, only 13,981 options have vested and 11,019 options have lapsed since January 31, 2014.
- 9 These options vest in full subject to (i) completion of Phase 2 proof of concept trials in both the Duchenne muscular dystrophy and *Clostridium difficile* infection programs or the third anniversary of the date of grant, whichever is sooner and (ii) the average closing share price of our ordinary shares on AIM being equal or greater than £2.213 in any period of 30 consecutive days ending on or before the third anniversary of the date of grant.
- 10 These options vest if the average closing share price of our ordinary shares on AIM is equal or greater than £2.055 in any period of 30 consecutive days during the period from the date of the grant to September 18, 2017. Once vested, 25% of the options can be exercised on or after September 18, 2016 and all of the options, if vested, can be exercised on or after September 18, 2017. These options will lapse if the performance condition is not met by September 18, 2017.
- 11 These options vest if the average closing share price of our ordinary shares on AIM is equal or greater than £2.145 in any period of 30 consecutive days during the period from the date of the grant to June 16, 2018. Once vested, a third of the options can be exercised on or after June 16, 2017 and all of the options, if vested, can be exercised on or after June 16, 2018. These options will lapse if the performance condition is not met by June 16, 2018.

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## [Table of Contents](#)

We periodically grant share options to employees, including executive officers, to incentivize employees, and align their interests with shareholders. We intend to grant additional options subject to a cap, as previously agreed with shareholders, of up to 15% of total issued share capital in any ten-year period.

### ***Pension Benefits***

We operate a defined contribution pension scheme which is available to all employees of our group. For the year ended January 31, 2016, we paid a total of £12,267 in lieu of pension contributions in respect of our Executive Director. In addition, for the year ended January 31, 2016, we made payments of \$13,200 to our Chief Financial Officer in lieu of contributions to a retirement savings plan and paid \$7,200 into his 401(k) plan.

### **Employment Agreements and Letters of Appointment**

#### ***Non-Executive Directors***

Our non-executive directors have each entered into a letter of appointment with us. Each non-executive director's letter of appointment provides for a continuous term for each non-executive director until termination of the letter of appointment, with the exception of Mr. Price's letter of appointment which is for a period to April 28, 2016 or until terminated. The letters of appointment automatically terminate if the relevant non-executive director is not re-elected to office by the shareholders, is removed from office by a resolution of the shareholders, vacates his or her office, is adjudged bankrupt or enters into any composition or arrangement with his or her creditors, is guilty of misconduct or commits a serious persistent breach of his or her appointment letter, or is unable to perform his or her duties under the appointment for 90 days in aggregate in any period of 12 months. The letters of appointment may also be terminated by mutual agreement or effective immediately upon written notice by one party to the other at any time. Each letter of appointment also includes confidentiality provisions for the protection our confidential information.

Each non-executive director, with the exception of Dr. Armstrong, receives £25,000 per annum for payment for services provided to us. Dr. Armstrong receives £50,000 per annum, which includes payment for services as chairman of our board of directors. Dr. Price and Professor Davies each receive an additional £5,000 per annum for each committee they sit on, Mr. Wurzer receives an additional £10,000 per annum as payment for services as chair of our audit committee and Ms. Andrews receives an additional £5,000 for the committee she sits on and an additional £10,000 per annum as payment for services as chair of our remuneration committee. Under the letters of appointment, each director is also entitled to reimbursement for all reasonable expenses incurred in connection with his or her duties as a non-executive director and that are in line with our expense policy.

#### ***Executive Director***

##### ***Glyn Edwards, Chief Executive Officer***

Mr. Edwards was appointed as the chief executive officer by a service agreement dated April 4, 2012 which continues unless terminated by us with six months' written notice or by Mr. Edwards with six months' written notice. We may also terminate the agreement with immediate effect by paying a sum in lieu of notice equal to the basic fixed salary which Mr. Edwards would have been entitled to receive during the notice period (and which shall not include payment in respect of benefits). We may otherwise terminate the agreement with immediate effect at any time without notice or payment in lieu of notice for certain circumstances including material breach of the agreement, serious misconduct, serious incompetence or negligence, criminal convictions or bankruptcy. The agreement includes a garden leave clause for a maximum of two months and there is no provision for compensation in addition to the contractual notice period.

Under his service agreement, Mr. Edwards initially received a salary of £200,000 per annum payable in arrears by equal monthly installments plus reasonable expenses. Effective in February 2016, Mr. Edwards' salary increased to £290,000 per annum. Mr. Edwards' service agreement also provides for a monthly pension

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## [Table of Contents](#)

contribution equal to 6% of salary, private medical cover (including cover for his spouse) and life assurance (for four times his gross salary). A share option package, as agreed by the chairman of our remuneration committee, will be awarded to Mr. Edwards subject to the rules of our share option scheme. Under his service agreement Mr. Edwards is prohibited from engaging in any type of business in competition with the business of our group, procuring orders from or doing business with any person who has done or proposed to do business with our group, and endeavouring to entice away from our group any senior manager or director engaged by our group, for a period of 12 months from the date of termination of his agreement. Mr. Edwards is also subject to confidentiality and protection of intellectual property provisions.

### ***Executive Management***

#### ***Erik Ostrowski, Chief Financial Officer***

Mr. Ostrowski was appointed as the chief financial officer pursuant to a letter of employment with Summit Therapeutics Inc. dated May 29, 2014 which continues unless terminated by either party at any time with or without notice. Under his letter of employment, Mr. Ostrowski initially received a salary of \$330,000 per annum and also received a signing bonus of \$50,000. Effective in February 2016, Mr. Ostrowski's salary increased to \$378,000 per annum.

Mr. Ostrowski is eligible to receive a discretionary bonus in an amount up to 40% of his annual base salary, as determined by our board of directors. Under his letter of employment, Mr. Ostrowski is reimbursed for medical, dental, vision, life and disability insurance coverage up to an aggregate monthly sum of \$1,667 until such time as a group insurance policy is established and is paid a monthly bonus amount of \$1,650 until such time as a retirement savings plan for the employees of Summit Therapeutics Inc. is established. As Summit Therapeutics Inc. has implemented a group insurance policy and a retirement savings plan for its employees, Mr. Ostrowski is no longer entitled to these reimbursements. In the event that Mr. Ostrowski's employment is terminated without good cause, he shall receive a severance payment equal to six months of his then annual base salary plus the value of six months benefits. Good cause includes willful misconduct, willful or gross neglect of job duties and unauthorized use or disclosure of the group's confidential information.

Mr. Ostrowski has also entered into a confidentiality, inventions, non-compete and non-solicitation agreement dated June 16, 2014 in favor of our group for the protection of our confidential information and intellectual property. Pursuant to that agreement Mr. Ostrowski has also agreed to non-compete and non-solicitation obligations for a period of 12 months following termination of his employment.

### **Equity Compensation Arrangements**

#### ***2016 Long Term Incentive Plan***

Our 2016 Long Term Incentive Plan, which we refer to as the Incentive Plan, was adopted on January 21, 2016. Under the Incentive Plan our board may grant conditional awards, options, cash conditional awards and cash options to any of our employees, including executive directors, and the employees of our subsidiaries. The Incentive Plan is administered by our board, which has full authority, consistent with the Incentive Plan, to administer the Incentive Plan, including the authority to interpret and construe any provision of the Incentive Plan and to adopt regulations for administering the Incentive Plan. Decisions of the board are final and binding on all parties. References to our board in this summary shall include any duly authorized committee of our board.

Our board may grant awards to any employees eligible to receive awards under the Incentive Plan in its discretion, subject to the rules of the Incentive Plan and such additional terms as the board may determine. However, the grant of an award is subject to obtaining any approval or consent required by any relevant authority and any other applicable laws or regulations. Awards must be granted by deed (or in such other written form as the board determines) and, as soon as reasonably practicable after the date on which an award is granted, the participant must be notified of the terms of his or her award.

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## [Table of Contents](#)

A conditional award is a right to acquire shares subject to and in accordance with the rules of the Incentive Plan with no exercise period. An option is a right to acquire shares subject to and in accordance with the rules of the Incentive Plan during a specified exercise period not to exceed ten years from the date the option is granted. A cash conditional award is a right to receive a cash payment equal to the market value (as determined by the board) of a number of notional shares underlying the vested portion of the award on the vest date. A cash option is a right to receive a cash payment equal to the market value (as determined by the board) of a number of notional shares underlying the vested portion of the award the date of exercise less the aggregate exercise price payable (if any).

### *Vesting of Awards*

Unless the board determines otherwise, the vesting of an award granted under the Incentive Plan is subject to the satisfaction of a performance condition. Subject to the terms of the Incentive Plan that apply upon a cessation of a participant's employment and upon certain corporate events, the performance condition will be measured over the performance period which, unless the board determines otherwise, will be at least three years. Performance conditions may be amended or substituted by the board if one or more events occur which cause the board to consider that an amended or substituted performance condition would be more appropriate and would not be materially less difficult to satisfy than the original performance condition to which the award was subject.

As soon as reasonably practicable after the end of the performance period relating to an award that is subject to a performance condition, our board will determine if and to what extent the performance condition has been satisfied. To the extent that the performance condition has not been satisfied in full, the remainder of the award will lapse immediately. Subject to the terms of the Incentive Plan that apply upon a cessation of a participant's employment and upon certain corporate events, an award that is subject to a performance condition will vest on the later of the date on which the board determines that the performance condition has been satisfied and the third anniversary of the date of grant of the award (or such other date determined by the board and communicated to the participant). An award that is not subject to the satisfaction of a performance condition will vest on the third anniversary of the date of grant (or such other date determined by the board and communicated to the participant). We refer to the date on which an award would normally vest, whether or not it is subject to the achievement of a performance condition, as the normal vesting date. Notwithstanding the foregoing, if there are share dealing restrictions (imposed by the company's share dealing code, the rules of the London Stock Exchange, or any other applicable laws or regulations) on the applicable normal vesting date, the award will vest on the date the dealing restrictions are lifted.

The Incentive Plan provides that if a participant dies prior to the date on which an award vests, a number of shares subject to such award will, unless the board determines otherwise, vest as soon as practicable following the participant's death. The number of shares that vest in such circumstance will depend, unless the board determines otherwise, on the extent to which any applicable performance condition has been satisfied at the date of death and the period of time that has elapsed since the start of the applicable performance period or, if the award is not subject to a performance condition, since the date of grant of the award, or such other period as the board determines. To the extent that an award does not vest in full, the remainder will lapse immediately.

In addition, the Incentive Plan provides that if a participant ceases to hold office or employment with any group member (as such term is defined in the Incentive Plan) prior to the date on which an award vests as a result of ill-health, injury or disability; redundancy or retirement; upon the company for which the participant works ceasing to be a group member or the transfer of an undertaking or part-undertaking in which the participant is employed to a company not in our group; or any other reason at the board's discretion (except where a participant is summarily dismissed), the board may determine that an award will vest as soon as practicable following the date of the participant's cessation of office or employment (or on such other date as determined by the board). Otherwise, the award will vest on the normal vesting date. In either case, the number of shares that will vest will depend, unless the board determines otherwise, on the extent to which any applicable performance condition has

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## [Table of Contents](#)

been satisfied at the date of cessation of office or employment and the period of time that has elapsed since the start of the applicable performance period or, if the award is not subject to a performance condition, since the date of grant of the award, or such other period as the board determines. To the extent that an award does not vest in full, the remainder will lapse immediately. If a participant ceases to hold office or employment with a group member for any other reason prior to the vesting date, his or her award will lapse at such time.

### *Exercise of Options*

Generally, options must be exercised while the participant holds office or employment with a member of our group. In the event, however, that a participant ceases to hold office or employment with a member of our group as a result of ill-health, injury or disability; redundancy or retirement; upon the company for which the participant works ceasing to be a member of our group or the transfer of an undertaking or part-undertaking in which the participant is employed to a company not in our group; or any other reason at the board's discretion (except where a participant is summarily dismissed) prior to the date on which the award becomes exercisable, the option may be exercised, subject to it lapsing upon certain corporate events, for a period of six months (or such other period as the board may determine) commencing on the date the award vests (as described above). If a participant ceases to hold office or employment with a member of our group on or after the vesting date of the option as a result of the participant's resignation or an event described in the preceding sentence on or after the date on which the award becomes exercisable, the option may be exercised, subject to it lapsing upon certain corporate events, for a period of six months (or such other period as the board may determine) from the date of such cessation.

If a participant dies before his or her vested option has been exercised, the participant's personal representatives may exercise the option for 12 months (or such other period as the board may determine) after the later of the date of the participant's death and the date on which the award becomes exercisable.

All awards lapse in prescribed circumstances, including upon the tenth anniversary of the date of grant; the expiry of the period (if any) allowed for the satisfaction of any performance condition without such condition having been satisfied; on the day on which a participant ceases to hold office or employment with a group member (with the exception of the carve outs detailed in the Incentive Plan and described above); the expiry of the period during which an option may be exercised following the participant's death or cessation of office or employment with a group member; on the bankruptcy of the participant; or at such time the participant attempts to transfer, assign, charge or otherwise dispose of his or her award in any way (other than in the event of the participant's death, to his personal representatives).

### *Dividend Equivalent*

The board may decide at any time prior to the issue or transfer of the shares in respect of an award that has vested that the participant will receive an amount (in cash and/or additional shares) equal in value to any dividends that would have been paid on those shares on such terms and over such period (ending no later than the vesting date of the award) as the board may determine. This amount may assume the reinvestment of dividends (on such basis as the board may determine) and may exclude or include special dividends.

### *Cash Equivalent/Net Settlement*

Unless our board has determined that this rule will not apply to all or any portion of an award, at any time prior to the date on which shares in respect of an award that has been vested or exercised have been issued or transferred to a participant, the board may determine that the participant will receive (i) in lieu of ordinary shares, a cash payment equal to the market value (as determined by the board) of the number of shares that would otherwise have been issued or transferred to the participant, less, in the case of an option, the aggregate exercise price payable (if any) or (ii) a reduced number of shares, which reduced number of shares will be equal to the market value (as determined by the board) of the number of shares that would otherwise have been issued or

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## [Table of Contents](#)

transferred to the participant, less (if the board so determines) any deductions (including, but not limited to any tax or similar liabilities) as may be required by law in respect of the award and, in the case of an option, the aggregate exercise price payable (if any).

### *Limits*

The board may not grant an award that would cause the number of ordinary shares allocated under the Incentive Plan and under any other employee share plan adopted by the company (including the 2005 EMI Scheme described below) to exceed a number equal to 15% of our ordinary share capital in issue at that time. The Incentive Plan sets forth rules for determining when shares are treated as allocated under the Incentive Plan and makes clear that the number of shares allocated does not include shares in respect of which the right to acquire such shares lapses or is released or shares allocated in respect of awards which are then satisfied in cash.

The Incentive Plan also includes an individual participant limit: no eligible employee may be granted an award which would, at the time of grant, cause the market value (as determined by the board) of all the shares subject to awards granted to the participant in a particular financial year of the company to exceed ten times the participant's annual base salary. If any award exceeds this limit, it will be scaled back accordingly.

### *Reduction of Awards and Clawback*

The board may, in its discretion, determine at any time prior to the vesting of an award to reduce (including to zero) the number of shares to which an award relates and/or impose further conditions on an award where there has been a material misstatement of our group's audited financial results; a material failure of risk management by us; serious reputational damage to us, any member of our group or a relevant business unit; material misconduct on the part of the participant or any other circumstances which the board considers to be similar in their nature or effect.

The board may also, in its discretion, determine that at any time after the vesting of an award prior to the later of the second anniversary of vesting and the fifth anniversary of the date of grant (or such longer period as is required by SEC rules that are applicable to us) to take the action described in the preceding paragraph (if an option has not yet been exercised or if shares or cash have not yet been delivered to the participant following the vesting of a conditional award or exercise of an option); require a participant or former participant to make a cash payment to us in respect of some or all of the shares or cash delivered to him or her under the award; and/or require a participant or former participant to transfer for no consideration some or all of the shares delivered to him or her under the award, where there has been a material misstatement of our group's audited financial results or material misconduct on the part of the participant. The board will have discretion to determine the basis on which the amount of cash or shares is calculated including whether, and the extent to which, any tax or social security liability is applicable to the award.

The board may decide to reduce (including to zero) the number of shares to which an award relates or may relate; impose further conditions on an award; and/or require a participant to transfer for no consideration some or all of the shares delivered to such participant under an award or make a cash payment to us in respect of some or all of the shares delivered to such participant under an award to effect the recovery of sums paid or shares delivered under any provisions similar to the rules described in the preceding paragraphs which are included in any bonus plan or share plan (other than the Incentive Plan) operated by any member of our group.

### *Corporate Events*

In certain specified circumstances involving a change of control of our company, all awards which have not yet vested will vest at the time of the change of control or an earlier date, to the extent determined by the board in its discretion, taking into account, unless the board determines otherwise, the extent to which any performance condition has, in the board's opinion, been satisfied and the period of time that has elapsed from the grant date to

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## [Table of Contents](#)

the date of the change of control (or the date of cessation of office or employment, if earlier). To the extent an award does not vest (or is not exchanged, as described below) it will lapse immediately. Vested options will be exercisable for three months (or such other period as our board may determine) from the date of the change of control, after which time all options will lapse. Notwithstanding the foregoing, an award will not vest but will be exchanged for a new award which, in the opinion of the board, is equivalent to the original award, but relates to shares in a different company, if an offer to exchange the award is made and accepted by the participant; there is an Internal Reorganisation (as that term is defined in the Incentive Plan) unless the board determines that the award should nevertheless vest as described above upon the Internal Reorganisation; or the board decides (before the relevant event) that an existing award will automatically be exchanged.

Awards may also vest upon or become exercisable for a specified period following the occurrence of certain other corporate events, including, for example, if a person becomes bound or entitled to acquire shares pursuant to certain provisions of U.K. company law; if the company is affected by a demerger, delisting, special dividend or other event. The board may also provide for the vesting of awards that have not yet vested or permit exercise of vested options within a specified period following the date on which we pass a resolution for a voluntary winding up of our company.

### *Variation of Share Capital*

In the event of any variation of the share capital of the company or a demerger, delisting, special dividend or other event which may, in the opinion of the board, affect the current or future value of shares, the number of shares that may be allocated under the Incentive Plan, the number of shares subject to an award, any performance condition and/or the exercise price of an option may be adjusted in such manner as the board determines.

### *Amendments*

The board may at any time amend the rules of the Incentive Plan or, except as otherwise provided in the Incentive Plan, the terms of any award. An amendment that is to the material disadvantage of the existing rights of a participant will not be made unless the participant has approved the amendment and no amendment will be made that would prevent the Incentive Plan from being an employees' share scheme under with U.K. law.

### *Termination*

The Incentive Plan will terminate, and no award may be granted under the Incentive Plan, after the tenth anniversary of adoption by Board. The Incentive Plan may also be terminated at any earlier time by the passing of a resolution by the board or an ordinary resolution of the company in general meeting. Termination of the Incentive Plan will be without prejudice to the existing rights of participants.

### ***Schedule 2 – Company Share Option Plan (CSOP)***

The purpose of the CSOP is to enable to us to grant CSOP options to eligible U.K. employees in accordance with the Income Tax (Earnings and Pensions) Act 2003, Schedule 4 (commonly known as the Enterprise Management Incentive Scheme provisions). Substantially all the rules of the Incentive Plan apply to CSOP options but there are a number of differences, including that there is no cash or dividend equivalent or ability to net settle a CSOP option; the eligibility rules are more limited; and the value of awards under the CSOP is subject to lower limits than those in the Incentive Plan.

### ***Schedule 3 – U.S. Participants***

We have in place rules governing awards granted to our U.S. employees which have been adapted from the Incentive Plan. The rules are substantially the same as the Incentive Plan, but are designed to ensure that awards granted under the Incentive Plan comply with or are exempt from Section 409A of the U.S. Internal Revenue Code.

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## [Table of Contents](#)

### **2005 EMI Scheme Rules**

Our 2005 EMI Scheme Rules were adopted on December 1, 2005. Under the scheme we may grant enterprise management incentive options, known as approved options, to those eligible bona fide employees and directors who qualify under applicable U.K. tax law and, to the extent that our employees and directors do not qualify for approved options, unapproved options may be granted to such eligible bona fide employees and directors.

#### *Exercise of Options*

Vesting of options is subject to such performance conditions as shall be set out in the agreement granting an option pursuant to the scheme and shall be otherwise determined by the board in accordance with the scheme. An approved option must be capable of being exercised within the period of ten years from the date of grant. Performance conditions may be amended, relaxed or waived by us if an event occurs which would cause us to consider that an amended performance condition would be a fairer measure of performance provided that such amended targets are no more and no less difficult to satisfy than they were prior to amendment.

Generally, options must be exercised while the participant is an eligible employee or director. In the event, however, that a participant ceases to be an eligible employee or director as a result of ill-health, injury, or disability; redundancy, retirement or pregnancy; upon the company for which the participant works ceasing to be a member of our group; or the transfer of an undertaking or part-undertaking in which the participant is employed to a company not in our group, the option may be exercised during the period commencing on the date he ceases to be an eligible employee or director and ending on 12 months thereafter. If a participant dies while he is an eligible employee or director, the participant's personal representatives may exercise the option for 12 months after the participant's death. All options lapse in prescribed circumstances, including: upon the tenth anniversary of the date of grant; the expiry of the period (if any) allowed for the satisfaction of any performance condition without such condition having been satisfied or becomes, in our opinion, incapable of being satisfied; on the day on which a participant ceases to be an eligible employee or director (with the exception of the carve outs detailed in the scheme); on the bankruptcy of the participant; or on the occurrence of a takeover.

Ordinary shares allotted under the scheme rank equally with the ordinary shares in issue at the date of allotment of the option shares. If and for so long as the ordinary shares are listed on AIM or any other exchange, we shall apply for ordinary shares allotted under the scheme to be admitted to the relevant exchange.

#### *Limits*

The maximum number of ordinary shares which may on any day be placed under option under the scheme, when added to the number of ordinary shares allocated for subscription for the preceding ten years under any employee share scheme, shall not exceed 15% of our ordinary share capital immediately prior to that day. Approved options are also subject to individual participant limits in accordance with the scheme and as provided for under relevant U.K. tax law. Lapsed options shall be disregarded for these purposes.

#### *Takeovers and Liquidations*

In certain specified circumstances involving a change of control, as specified in accordance with U.K. tax law, an option may automatically vest or otherwise be determined to vest by our board of directors. Where an option vests by reason of a change of control, the exercise of the option shall be conditional upon the change of control occurring. Our board of directors may, in certain circumstances, determine that an option shall lapse upon the change of control or six months thereafter.

Options may also be exercisable for the relevant period in the event of certain court sanctioned restructurings or amalgamations of us or if another company becomes bound or entitled to acquire our ordinary shares pursuant to certain provisions of U.K. companies law. Our board of directors may also permit exercise of the options within a period following the date on which we pass a resolution for voluntary winding up.



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## [Table of Contents](#)

In the event of a person obtaining control of us as a result of a takeover offer or court sanctioned restructuring or amalgamation or qualifying exchange of shares within the relevant U.K. laws, the participant may, by agreement with the acquiring company, release options in consideration for the grant of a new option with respect to the acquiring company's shares.

### *Variation of Share Capital*

In the event of any capitalization, rights issue, consolidation, subdivision, reduction or other variation of our share capital the number of ordinary shares comprised in an option and the exercise price in respect of the ordinary shares shall be varied as the directors determine and our auditors confirm to be fair and reasonable. Limitations apply to the extent to which any such adjustments may reduce the price at which ordinary shares may be purchased pursuant to the exercise of an option and no adjustment will take effect until it has been approved by the United Kingdom tax authorities in accordance with applicable U.K. tax law.

### *Amendments*

Our board of directors may waive or amend the scheme subject to certain limitations which require approval of our shareholders.

### *Scheme Rules Governing Options Awarded to U.S. Employees*

We have in place rules governing options awarded to our U.S. employees which have been adapted from our 2005 EMI Scheme Rules. The rules of the scheme are substantially the same as the 2005 EMI Scheme Rules.

### *Options Granted Outside the 2005 EMI Scheme Rules*

Certain of our consultants who are not eligible employees of companies in our group for the purposes of our option scheme rules, and therefore, are not eligible to participate in our option schemes as detailed above, have been granted options to acquire our shares pursuant to separate unapproved option agreements. These options are generally on comparable terms to options granted under the 2005 EMI Scheme Rules.

### **Limitations on Liability and Indemnification Matters**

To the extent permitted by the U.K. Companies Act 2006, we are empowered to indemnify our directors against any liability they incur by reason of their directorship. We maintain directors' and officers' insurance to insure such persons against certain liabilities. We have entered into a deed of indemnity with each of our directors and executive officers.

## **C. Board Practices**

### **Board Composition**

Our board of directors currently consists of seven members, a non-executive chairman, one executive director and five non-executive directors.

Under NASDAQ listing standards, a director will only qualify as an "independent director" if, in the opinion of the listed company's board of directors, that person does not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director. Our board of directors has determined that all of our directors, other than Mr. Edwards, qualify as independent directors under Rule 5605(a)(2) of the NASDAQ listing standards.

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## [Table of Contents](#)

### **Corporate Governance and Committees of the Board**

#### ***Corporate Governance***

Our board of directors is responsible for overall corporate governance and for supervising the general affairs and business of our company and its subsidiaries. As an AIM-listed company, we are subject to the continuing requirements of the AIM Rules for Companies as published by the London Stock Exchange plc from time to time. Our board also adheres to the principles of the U.K. Corporate Governance Code in such respects as it considers appropriate for our size and the nature of our business.

Our board is responsible to our shareholders for the proper management of our company and its subsidiaries and setting the overall direction and strategy of our group, reviewing scientific, operational and financial performance, and advising on management appointments. All key operational and investment decisions are subject to board approval.

There is a clear separation of the roles of chief executive officer and non-executive chairman. The chairman is responsible for overseeing the running of our board, ensuring that no individual or group dominates our board's decision-making and ensuring that the non-executive directors are properly briefed on matters. The chief executive officer has the responsibility for implementing the strategy of our board and managing the day-to-day business activities of our group.

Under our articles of association, all of our directors are subject to election by shareholders at the first annual general meeting after their appointment to our board and to re-election by shareholders at least once every three years. Since 2012, our board had adopted a policy of re-electing non-executive directors on an annual basis. For 2016 our board will revert to its previous policy whereby all directors will offer themselves for re-election by rotation, with every director doing so at least once every three years. Accordingly we plan to put one-third of the directors up for re-election at the 2016 annual general meeting. The Board considers a classified board structure and the practice of retiring by rotation every three years to be appropriate given that, as a biopharmaceutical company, the nature of our business is to carry out long-term research and development. Further details regarding the directors to be proposed for re-election will be detailed in the 2016 notice of annual general meeting that will be distributed to shareholders in accordance with our articles of association.

#### ***Committees of the Board***

We have established an audit committee, a remuneration committee and a nominating and corporate governance committee and have adopted a charter for each of these committees.

##### *Audit Committee*

The members of our audit committee are Mr. Wurzer, Dr. Price and Ms. Andrews. Mr. Wurzer is the chair of the audit committee. Our audit committee's responsibilities include:

- appointing, approving the compensation of, and assessing the independence, objectivity and effectiveness of our registered public accounting firm;
- overseeing the work of our independent registered public accounting firm, including through the receipt and consideration of reports from that firm;
- monitoring the integrity of our financial statements by reviewing and discussing with management and our independent registered public accounting firm our annual and quarterly financial statements and related disclosures;
- reviewing and monitoring our internal control over financial reporting, disclosure controls and procedures and code of business conduct;
- reviewing and monitoring the effectiveness of our internal audit function;

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## [Table of Contents](#)

- overseeing our risk assessment and risk management policies;
- establishing policies regarding procedures for the receipt and retention of accounting related complaints and concerns;
- meeting independently with our internal auditing staff, if any, our independent registered public accounting firm and management; and
- reviewing and approving or ratifying any related person transactions.

All audit and non-audit services, other than *de minimis* non-audit services, to be provided to us by our independent registered public accounting firm must be approved in advance by our audit committee.

Our board of directors has determined that Mr. Wurzer is an “audit committee financial expert” as defined in Item 16A of Form 20-F.

In order to satisfy the independence criteria for audit committee members set forth in Rule 10A-3(b)(1) under the Exchange Act, each member of an audit committee of a listed company may not, other than in his or her capacity as a member of the audit committee, the board of directors, or any other board committee, accept, directly or indirectly, any consulting, advisory, or other compensatory fee from the listed company or any of its subsidiaries or otherwise be an affiliated person of the listed company or any of its subsidiaries. We believe that the composition of our audit committee meets the requirements for independence under current NASDAQ and SEC rules and regulations.

### *Remuneration Committee*

The members of our remuneration committee are Dr. Armstrong, Ms. Andrews and Professor Davies. Ms. Andrews is the chair of the remuneration committee. Our remuneration committee’s responsibilities include:

- reviewing and approving, or making recommendations to our board of directors with respect to, the compensation of our directors and executive management;
- overseeing an evaluation of our executive management; and
- overseeing and administering our employee share option scheme or equity incentive plans in operation from time to time.

In order to satisfy the independence criteria for remuneration committee members set forth in Rule 10C-1 under the Exchange Act, all factors specifically relevant to determining whether a director has a relationship to such company which is material to that director’s ability to be independent from management in connection with the duties of a remuneration committee member must be considered, including, but not limited to: (1) the source of compensation of the director, including any consulting advisory or other compensatory fee paid by such company to the director; and (2) whether the director is affiliated with the company or any of its subsidiaries or affiliates. We believe the composition of our remuneration committee meets the requirements for independence under current NASDAQ and SEC rules and regulations.

### *Nominating and Corporate Governance Committee*

The members of our nominating and corporate governance committee are Dr. Armstrong, Dr. Price, Professor Davies, Mr. Zambelletti, Ms. Andrews and Mr. Wurzer. Dr. Armstrong is the chair of the nominating and corporate governance committee. Our nominating and corporate governance committee’s responsibilities include:

- identifying individuals qualified to become members of our board;
- recommending to our board the persons to be nominated for election as directors and to each of our board’s committees;

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## [Table of Contents](#)

- overseeing a periodic evaluation of our board;
- reviewing and making recommendations to our board with respect to our board leadership structure;
- reviewing and making recommendations to our board with respect to management succession planning; and
- developing and recommending to our board corporate governance principles.

### **Code of Business Conduct and Ethics**

Our Code of Business Conduct and Ethics is applicable to all of our employees, officers and directors and is available on our website at [www.summitplc.com](http://www.summitplc.com). Our Code of Business Conduct and Ethics provides that our directors and officers are expected to avoid any action, position or interest that conflicts with the interests of our company or gives the appearance of a conflict. Our directors and officers have an obligation under our Code of Business Conduct and Ethics to advance our company's interests when the opportunity to do so arises. We expect that any amendment to this code, or any waivers of its requirements, will be disclosed on our website. Information contained on, or that can be accessed through, our website is not incorporated by reference into this document, and you should not consider information on our website to be part of this document.

### **D. Employees**

The number of our employees by geographic location and function as of the end of the period for our fiscal years ended January 31, 2016, 2015 and 2014 was as follows:

	<u>2016</u>	<u>2015</u>	<u>2014</u>
<b>By Geography</b>			
United Kingdom	25	21	21
North America	12	4	—
<b>Total</b>	<u>37</u>	<u>25</u>	<u>21</u>
	<u>2016</u>	<u>2015</u>	<u>2014</u>
<b>By Function</b>			
Research & Development	22	15	10
General & Administrative	15	10	11
<b>Total</b>	<u>37</u>	<u>25</u>	<u>21</u>

Our employees are not represented by any collective bargaining agreements, and we have never experienced a work stoppage. We believe our employee relations are good.

### **Item 7: Major Shareholders and Related Party Transactions**

#### **A. Major Shareholders**

The following table sets forth information with respect to the beneficial ownership of our ordinary shares as of April 15, 2016 by:

- each of the members of our board of directors;
- each of our other executive officers; and
- each person, or group of affiliated persons, who is known by us to beneficially own more than 5% of our ordinary shares.

[Table of Contents](#)

Beneficial ownership is determined in accordance with the rules and regulations of the SEC and includes voting or investment power with respect to our ordinary shares. Our ordinary shares subject to options or warrants that are currently exercisable or exercisable within 60 days of April 15, 2016 are considered outstanding and beneficially owned by the person holding the options or warrants for the purpose of calculating the percentage ownership of that person but not for the purpose of calculating the percentage ownership of any other person. Except as otherwise noted, the persons and entities in this table have sole voting and investing power with respect to all of the ordinary shares beneficially owned by them. Except as otherwise indicated in the table below, addresses of named beneficial owners are c/o Summit Therapeutics plc, 85b Park Drive, Milton Park, Abingdon, Oxfordshire OX14 4RY, United Kingdom. All holders of our ordinary shares, including those shareholders listed below, have the same voting rights with respect to such shares.

Name of beneficial owner	Ordinary shares beneficially owned	
	Shares	%
<b>Executive officers and directors</b>		
Glyn Edwards <sup>(1)</sup>	532,716	*
Erik Ostrowski	—	—
Frank Armstrong	14,442	*
Barry Price <sup>(2)</sup>	89,711	*
Stephen Davies	584,981	1.00%
Leopoldo Zambeletti	—	—
Valerie Andrews	10,500	—
David Wurzer	7,500	—
All executive officers and directors as a group (8 persons) <sup>(3)</sup>	1,239,850	2.41%
<b>5% shareholders</b>		
Lansdowne Partners (UK) LLP <sup>(4)</sup>	15,727,170	25.79%
Robert Keith	5,009,515	8.21%
Point72 Asset Management, L.P. <sup>(5)</sup>	4,879,240	7.96%
Entities affiliated with Richard Griffiths	3,207,575	5.26%

\* Less than one percent.

- (1) Consists of (a) 299,383 ordinary shares underlying options that are exercisable as of April 15, 2016 or will become exercisable within 60 days after such date and (b) 233,333 ordinary shares.
- (2) Consists of (a) 13,981 ordinary shares underlying options that are exercisable as of April 15, 2016 or will become exercisable within 60 days after such date and (b) 75,730 ordinary shares.
- (3) Consists of (a) 313,364 ordinary shares underlying options that are exercisable as of April 15, 2016 or will become exercisable within 60 days after such date and (b) 926,486 ordinary shares.
- (4) These shares are registered in the name of HSBC Client Holdings Nominee (UK) Limited. Lansdowne Partners (UK) LLP may be deemed to have voting and dispositive power over the ordinary shares. Investment decisions with respect to the ordinary shares held by Lansdowne Partners (UK) LLP can be made by Stuart Roden, Peter Davies and Jonathan Regis. The address of Lansdowne Partners (UK) LLP is 15 Davies Street, London, W1K 3AG.
- (5) This information is based on information contained in a TR-1 Notification sent to us on April 8, 2016 by Point72 Asset Management, L.P., Point72 Capital Advisors, Inc. and Steven A. Cohen. Each of Point72 Asset Management, L.P., Point72 Capital Advisors, Inc. and Mr. Cohen reported that it or he has shared voting and dispositive power with respect to 4,879,240 of our ordinary shares held by certain investment funds managed by Point72 Asset Management, L.P. Point72 Capital Advisors, Inc. is the general partner of Point72 Asset Management, L.P., and Mr. Cohen controls Point72 Capital Advisors, Inc. The address provided therein for Point72 Asset Management, L.P., Point72 Capital Advisors, Inc. and Mr. Cohen is 72 Cummings Point Road, Stamford, CT 06902. Each of Point72 Asset Management, L.P., Point72 Capital Advisors Inc. and Mr. Cohen disclaims beneficial ownership of such shares.

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## [Table of Contents](#)

Bank of New York Mellon, or BNY Mellon, is the holder of record for the company's ADR program, pursuant to which each ADS represents five ordinary shares. As of April 15, 2016, BNY Mellon held 21,468,470 ordinary shares representing 34.9% of the issued share capital held at that date. As of April 15, 2016, we had two holders of record with addresses in the United States, and such holders held less than one percent of our outstanding ordinary shares. As a result, the number of holders of record or registered holders in the United States is not representative of the number of beneficial holders or of the residence of beneficial holders.

To our knowledge, there has been no significant change in the percentage ownership held by the principal shareholders listed above since April 15, 2016.

### **B. Related Party Transactions**

Since February 1, 2015, we have engaged in the following transactions with our directors, executive officers and holders of 5% or more of our ordinary shares, and affiliates of our directors, executive officers and holders of more than 5% of our ordinary shares. We believe that all of these transactions were on terms as favorable as could have been obtained from unrelated third parties.

### **Participation in U.S. Initial Public Offering**

Certain of our principal shareholders and their affiliated entities purchased 1,314,454 of our ADSs in our initial public offering in the United States at the initial public offering price of \$9.90 per ADS. The following table sets forth the aggregate number of ADSs that our principal shareholders and their affiliated entities purchased.

<u>Beneficial Owner</u>	<u>Number of ADSs Purchased in Initial Public Offering</u>
Lansdowne Partners (UK) LLP	930,000
Robert Keith	232,939
Entities affiliated with Richard Griffiths	151,515

### **C. Interests of Experts and Counsel**

Not applicable.

## **Item 8: Financial Information**

### **A. Consolidated Financial Statements and Other Financial Information.**

See "Item 18. Financial Statements."

### **B. Significant Changes.**

See Note 23 of our consolidated financial statements at the end of this Annual Report for a description of the significant changes since January 31, 2016.

### **C. Dividends**

We have never declared or paid any dividends and currently intend to retain all available earnings generated by our operations for the development and growth of our business. We do not currently anticipate paying any cash dividends on our shares.

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[Table of Contents](#)**Item 9: The Listing****A. Listing Details**

Our ordinary shares have been trading on AIM, a market operated by the London Stock Exchange plc, or AIM, under the symbol “SUMM” since October 14, 2004.

The following table sets forth, for the periods indicated, the reported high and low closing sale prices of our ordinary shares on AIM in pounds sterling and U.S. dollars. Price per ordinary share in U.S. dollars amounts below have been translated into U.S. dollars at the noon buying rate of the Federal Reserve Bank of New York on January 29, 2016 of £1.00 to \$1.4184.

	Price Per Ordinary Share		Price Per Ordinary Share	
	£		\$	
	High	Low	High	Low
<b>Annual (Fiscal Year Ended January 31):</b>				
2012	2.68	0.45	3.80	0.64
2013	1.65	0.45	2.34	0.64
2014	3.90	0.78	5.53	1.11
2015	2.20	1.04	3.12	1.48
2016	1.84	1.17	2.61	1.66
<b>Quarterly:</b>				
First Quarter 2015	2.20	1.60	3.12	2.27
Second Quarter 2015	1.68	1.04	2.38	1.48
Third Quarter 2015	1.78	1.07	2.52	1.52
Fourth Quarter 2015	1.41	1.16	2.00	1.65
First Quarter 2016	1.84	1.36	2.61	1.93
Second Quarter 2016	1.61	1.33	2.28	1.89
Third Quarter 2016	1.63	1.29	2.31	1.83
Fourth Quarter 2016	1.50	1.17	2.13	1.66
First Quarter 2017	1.33	0.94	1.89	1.33
<b>Monthly:</b>				
November 2015	1.37	1.17	1.94	1.66
December 2015	1.50	1.31	2.13	1.86
January 2016	1.48	1.22	2.10	1.73
February 2016	1.23	1.08	1.74	1.53
March 2016	1.08	0.96	1.53	1.36
April 2016	1.33	0.94	1.89	1.33
May 2016 (through May 6, 2016)	1.26	1.18	1.79	1.67

On May 6, 2016, the last reported sales price of our ordinary shares on AIM was £1.18 per ordinary share (\$1.67 per ordinary share).

## Table of Contents

Our American Depositary Shares, or ADSs, have been trading on the NASDAQ Global Market under the symbol “SMMT” since March 5, 2015. The following table sets forth, for the periods indicated, the reported high and low closing sale prices of our ADSs on the NASDAQ Global Market in U.S. dollars.

	Price Per ADS	
	S	
	High	Low
<b>Annual (Fiscal Year Ended January 31):</b>		
2016	13.68	8.25
<b>Quarterly:</b>		
First Quarter 2016 (from March 5, 2015)	13.68	10.19
Second Quarter 2016	13.00	10.13
Third Quarter 2016	13.29	10.10
Fourth Quarter 2016	11.80	8.25
First Quarter 2017	10.97	6.35
<b>Monthly:</b>		
November 2015	11.10	9.10
December 2015	11.80	10.19
January 2016	11.11	8.25
February 2016	9.23	6.75
March 2016	7.60	6.35
April 2016	10.97	6.86
May 2016 (through May 6, 2016)	9.84	8.40

On May 6, 2016, the last reported sales price of our ADSs on the NASDAQ Global Market was \$8.57 per ADS.

### B. Plan of Distribution

Not applicable.

### C. Markets

Our ordinary shares are listed on AIM under the symbol “SUMM” and our ADSs are listed on the NASDAQ Global Market under the symbol “SMMT.”

### D. Selling Shareholders

Not applicable.

### E. Dilution

Not applicable.

### F. Expenses of the Issue

Not applicable.

## Item 10: Additional Information

### A. Share Capital

Not applicable.



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[Table of Contents](#)

**B. Memorandum and Articles of Association**

We incorporate by reference into this Annual Report the description of our amended articles of association contained in our F-1 registration statement (File No. 333-102807) originally filed with the SEC on January 30, 2015, as amended.

**C. Material Contracts**

Except as otherwise disclosed in this Annual Report (including the exhibits hereto), we are not currently, and have not been in the last two years, party to any material contract, other than contracts entered into in the ordinary course of business.

**D. Exchange Controls**

There are no governmental laws, decrees, regulations or other legislation in the United Kingdom that may affect the import or export of capital, including the availability of cash and cash equivalents for use by us, or that may affect the remittance of dividends, interest, or other payments by us to non-resident holders of our ordinary shares or ADSs, other than withholding tax requirements. There is no limitation imposed by English law or our articles of association on the right of non-residents to hold or vote shares.

**E. Taxation**

**Taxation in the United Kingdom**

The following is a general summary of certain U.K. tax considerations relating to the ownership and disposal of our ordinary shares or ADS and does not address all possible tax consequences relating to an investment in our ordinary share or ADS. It is based on U.K. tax law and generally published HM Revenue & Customs, or HMRC, practice as of the date of this Annual Report, both of which are subject to change, possibly with retrospective effect.

Save as provided otherwise, this summary applies only to a person who is the absolute beneficial owner of our ordinary share or ADS and who is resident (and, in the case of an individual, domiciled) in the United Kingdom for tax purposes and who is not resident for tax purposes in any other jurisdiction and does not have a permanent establishment or fixed base in any other jurisdiction with which the holding of our ordinary share or ADS is connected (“U.K. Holders”). A person (a) who is not resident (or, if resident, is not domiciled) in the United Kingdom for tax purposes, including an individual and company who trades in the United Kingdom through a branch, agency or permanent establishment in the United Kingdom to which an ordinary share or ADS is attributable, or (b) who is resident or otherwise subject to tax in a jurisdiction outside the United Kingdom, is recommended to seek the advice of professional advisors in relation to their taxation obligations.

This summary is for general information only and is not intended to be, nor should it be considered to be, legal or tax advice to any particular investor. It does not address all of the tax considerations that may be relevant to specific investors in light of their particular circumstances or to investors subject to special treatment under U.K. tax law. In particular:

- this summary only applies to an absolute beneficial owner of ordinary share or ADS and any dividend paid in respect of the ordinary share where the dividend is regarded for U.K. tax purposes as that person’s own income (and not the income of some other person); and
- this summary: (a) only addresses the principal U.K. tax consequences for an investor who holds ordinary share or ADS as a capital asset, (b) does not address the tax consequences that may be relevant to certain special classes of investor such as a dealer, broker or trader in shares or securities and any other person who holds ordinary share or ADS otherwise than as an investment, (c) does not address the tax consequences for a holder that is a financial institution, insurance company, collective

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## [Table of Contents](#)

investment scheme, pension scheme, charity or tax-exempt organization, (d) assumes that a holder is not an officer or employee of the company (nor of any related company) and has not (and is not deemed to have) acquired the ordinary share or ADS by virtue of an office or employment, and (e) assumes that a holder does not control or hold (and is not deemed to control or hold), either alone or together with one or more associated or connected persons, directly or indirectly (including through the holding of an ADS), an interest of 10% or more in the issued share capital (or in any class thereof), voting power, rights to profits or capital of the company, and is not otherwise connected with the company.

This summary further assumes that a holder of ADSs is the beneficial owner of the underlying ordinary share for U.K. direct tax purposes.

POTENTIAL INVESTORS IN THE ADSs SHOULD SATISFY THEMSELVES PRIOR TO INVESTING AS TO THE OVERALL TAX CONSEQUENCES, INCLUDING, SPECIFICALLY, THE CONSEQUENCES UNDER U.K. TAX LAW AND HMRC PRACTICE OF THE ACQUISITION, OWNERSHIP AND DISPOSAL OF THE ORDINARY SHARES OR ADSs, IN THEIR OWN PARTICULAR CIRCUMSTANCES BY CONSULTING THEIR OWN TAX ADVISERS.

### ***Taxation of Dividends***

#### *Withholding Tax*

A dividend payment in respect of an ordinary share may be made without withholding or deduction for or on account of U.K. tax.

#### *Income Tax*

A dividend received by individual U.K. Holders will be subject to U.K. income tax. The existing system of grossing up dividends will be abolished from April 2016 and replaced with a simple rate of tax on dividends referred to below.

An individual holder of an ordinary share or ADS who is not a U.K. Holder will not be chargeable to U.K. income tax on a dividend paid by the company, unless such holder carries on (whether solely or in partnership) a trade, profession or vocation in the United Kingdom through a branch or agency in the United Kingdom to which the ordinary share or ADS is attributable. In these circumstances, such holder may, depending on his or her individual circumstances, be chargeable to U.K. income tax on a dividend received from the company.

The rate of U.K. income tax that is chargeable on dividends received in the tax year 2016/2017 by (i) an additional rate taxpayer is 38.1%, (ii) a higher rate taxpayer is 32.5%, and (iii) a basic rate taxpayer is 7.5%. An individual U.K. Holder may be entitled to a tax-free dividend allowance (in addition to their personal allowance) of £5,000. An individual's dividend income is treated as the top slice of their total income that is chargeable to U.K. income tax.

#### *Corporation Tax*

A U.K. Holder within the charge to U.K. corporation tax may be entitled to exemption from U.K. corporation tax in respect of dividend payments. If the conditions for the exemption are not satisfied, or such U.K. Holder elects for an otherwise exempt dividend to be taxable, U.K. corporation tax will be chargeable on the gross amount of a dividend. If potential investors are in any doubt as to their position, they should consult their own professional advisers.

A corporate holder of an ordinary share or ADS that is not a U.K. Holder will not be subject to U.K. corporation tax on a dividend received from the company, unless it carries on a trade in the United Kingdom through a permanent establishment to which the ordinary share or ADS is attributable. In these circumstances, such holder may, depending on its individual circumstances and if the exemption from U.K. corporation tax discussed above does not apply, be chargeable to U.K. corporation tax on dividends received from the company.

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## [Table of Contents](#)

### ***Taxation of Disposals***

#### ***U.K. Holders***

A disposal or deemed disposal of an ordinary share or ADS by an individual U.K. Holder may, depending on his or her individual circumstances, give rise to a chargeable gain or to an allowable loss for the purpose of U.K. capital gains tax. The principal factors that will determine the capital gains tax position on a disposal of an ordinary share or ADS are the extent to which the holder realizes any other capital gains in the tax year in which the disposal is made, the extent to which the holder has incurred capital losses in that or any earlier tax year and the level of the annual exemption for tax-free gains in that tax year (the “annual exemption”). The annual exemption for the 2016/2017 tax year is £11,100. If, after all allowable deductions, an individual U.K. Holder’s total taxable income for the year exceeds the basic rate income tax limit, a taxable capital gain accruing on a disposal of an ordinary share or an ADS is taxed at the rate of 20%. In other cases, a taxable capital gain accruing on a disposal of an ordinary share or ADS may be taxed at the rate of 10% or the rate of 20% or at a combination of both rates. These rates, which are a reduction from those applicable in the 2015/2016 tax year, were announced by the Chancellor of the Exchequer on 16 March 2016 and are subject to legislative confirmation.

An individual U.K. Holder who ceases to be resident in the United Kingdom (or who fails to be regarded as resident in a territory outside the United Kingdom for the purposes of double taxation relief) for a period of five tax years or less than five years and who disposes of an ordinary share or ADS during that period of temporary non-residence may be liable to U.K. capital gains tax on a chargeable gain accruing on such disposal on his or her return to the United Kingdom (or upon ceasing to be regarded as resident outside the United Kingdom for the purposes of double taxation relief) (subject to available exemptions or reliefs).

A disposal (or deemed disposal) of an ordinary share or ADS by a corporate U.K. Holder may give rise to a chargeable gain or an allowable loss for the purpose of U.K. corporation tax. Such a holder should be entitled to an indexation allowance, which applies to reduce a capital gain to the extent that such a gain arises due to inflation. The allowance may reduce a chargeable gain but will not create or increase an allowable loss.

Any gain or loss in respect of currency fluctuations over the period of holding an ordinary share or an ADS are also brought into account on a disposal.

#### ***Non-U.K. Holders***

An individual holder who is not a U.K. Holder will not be liable to U.K. capital gains tax on capital gains realized on the disposal of an ordinary share or ADS unless such holder carries on (whether solely or in partnership) a trade, profession or vocation in the United Kingdom through a branch or agency in the United Kingdom to which the ordinary share or ADS is attributable. In these circumstances, such holder may, depending on his or her individual circumstances, be chargeable to U.K. capital gains tax on chargeable gains arising from a disposal of his or her ordinary share or ADS.

A corporate holder of an ordinary share or ADS that is not a U.K. Holder will not be liable for U.K. corporation tax on chargeable gains realized on the disposal of an ordinary share or ADS unless it carries on a trade in the United Kingdom through a permanent establishment to which the ordinary share or ADS is attributable. In these circumstances, a disposal (or deemed disposal) of an ordinary share or ADS by such holder may give rise to a chargeable gain or an allowable loss for the purposes of U.K. corporation tax.

### ***Inheritance Tax***

If for the purposes of the Double Taxation Relief (Taxes on Estates of Deceased Persons and on Gifts) Treaty United States of America Order 1979 (SI 1979/1454) between the United States and the United Kingdom an individual holder is domiciled at the time of their death or at the time of a transfer made during their lifetime, in the United States and is not a national of the United Kingdom, any ordinary share or ADS beneficially owned

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## [Table of Contents](#)

by that holder should not generally be subject to U.K. inheritance tax, provided that any applicable United States federal gift or estate tax liability is paid, except where (i) the ordinary share or ADS is part of the business property of a U.K. permanent establishment or pertain to a U.K. fixed base used for the performance of independent personal services; or (ii) the ordinary share or ADS is comprised in a settlement unless, at the time the settlement was made, the settlor was domiciled in the United States and not a national of the U.K. (in which case no charge to U.K. inheritance tax should apply).

### ***Stamp Duty and Stamp Duty Reserve Tax***

The stamp duty and stamp duty reserve tax, or SDRT, treatment of the issue and transfer of, and the agreement to transfer, an ordinary share outside a depositary receipt system or a clearance service are discussed in the paragraphs under “*General*” below. The stamp duty and SDRT treatment of such transactions in relation to such systems are discussed in the paragraphs under “*Depositary Receipt Systems and Clearance Services*” below.

#### ***General***

An agreement to transfer an ordinary share will normally give rise to a charge to SDRT at the rate of 0.5% of the amount or value of the consideration payable for the transfer. SDRT is, in general, payable by the purchaser.

A transfer of an ordinary share or ADS will generally be subject to stamp duty at the rate of 0.5% of the consideration given for the transfer (rounded up to the next £5). The purchaser normally pays the stamp duty.

If a duly stamped transfer completing an agreement to transfer is produced within six years of the date on which the agreement is made (or, if the agreement is conditional, the date on which the agreement becomes unconditional) and SDRT already paid is generally repayable, normally with interest, and any SDRT charge yet to be paid is cancelled.

#### ***Depositary Receipt Systems and Clearance Services***

Following the ECJ decision in *C-569/07 HSBC Holdings Plc, Vidacos Nominees Limited v The Commissioners of Her Majesty's Revenue & Customs* and the First-tier Tax Tribunal decision in *HSBC Holdings Plc and the Bank of New York Mellon Corporation v The Commissioners of Her Majesty's Revenue & Customs*, HM Revenue & Customs has confirmed that 1.5% SDRT is no longer payable when shares are issued or transferred to a clearance service (such as, in our understanding, DTC) or depositary receipt system as an integral part of a raising of capital.

Where an ordinary share or ADS is otherwise transferred (i) to, or to a nominee or an agent for, a person whose business is or includes the provision of clearance services or (ii) to, or to a nominee or an agent for a person whose business is or includes issuing depositary receipts, stamp duty or SDRT will generally be payable at the higher rate of 1.5% of the amount or value of the consideration given or, in certain circumstances, the value of the shares.

There is an exception from the 1.5% charge on the transfer to, or to a nominee or agent for, a clearance service where the clearance service has made and maintained an election under section 97A(1) of the Finance Act 1986, which has been approved by HM Revenue & Customs. In these circumstances, SDRT at the rate of 0.5% of the amount or value of the consideration payable for the transfer will arise on any transfer of ordinary share into such an account and on subsequent agreements to transfer such shares within such account. It is our understanding that DTC has not made an election under section 97A(1) of the Finance Act of 1986.

Any liability for stamp duty or SDRT in respect of a transfer into a clearance service or depositary receipt system, or in respect of a transfer within such a service, which does arise will strictly be accountable by the clearance service or depositary receipt system operator or their nominee, as the case may be, but will, in practice, be payable by the participants in the clearance service or depositary receipt system.

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## [Table of Contents](#)

### ***The Proposed Financial Transactions Tax***

The European Commission has published a proposal for a Directive for a common Financial Transactions Tax, or FTT, in Belgium, Germany, Estonia, Greece, Spain, France, Italy, Austria, Portugal, Slovenia and Slovakia (described below as the “participating Member States”).

The proposed FTT has very broad scope and could, if introduced in its current form, apply to certain dealings in ordinary shares (including secondary market transactions) in certain circumstances.

Under current proposals the FTT could apply in certain circumstances to persons both within and outside of the participating Member States. Generally, it would apply to certain dealings in ordinary shares where at least one party is a financial institution, and at least one party is established in a participating Member State. A financial institution may be, or be deemed to be, “established” in a participating Member State in a broad range of circumstance, including (i) by transacting with a person established in a participating Member State or (ii) where the financial instrument which is subject to the dealings is issued in participating Member State.

The FTT proposal remains subject to negotiation between the participating Member States. Further, the legality of the FTT proposals is at present uncertain. It may therefore be altered prior to any implementation, the timing of which remains unclear. Additional EU Member States may decide to participate. Prospective holders of an ordinary share or ADS are advised to seek their own professional advice in relation to the FTT.

### **Taxation in the United States**

The following summary of the material U.S. federal income tax consequences of the acquisition, ownership and disposition of the ADSs is based upon current law and does not purport to be a comprehensive discussion of all the tax considerations that may be relevant to a particular U.S. holder, as defined below, of the ADSs. This summary is based on current provisions of the Internal Revenue Code of 1986, as amended, or the Code, existing, final, temporary and proposed United States Treasury Regulations, administrative rulings and judicial decisions, in each case as available on the date of this Annual Report. All of the foregoing are subject to change, which change could apply retroactively and could affect the tax consequences described below.

This section summarizes the material U.S. federal income tax consequences to U.S. holders, as defined below, of an investment in the ADSs. This summary addresses only the U.S. federal income tax considerations for U.S. holders that acquire and hold the ADSs as capital assets. **Each prospective investor should consult a professional tax advisor with respect to the tax consequences of the acquisition, ownership or disposition of the ADSs.** This summary does not address tax considerations applicable to a holder of ADSs that may be subject to special tax rules including, without limitation, the following:

- banks or other financial institutions;
- insurance companies;
- dealers or traders in securities, currencies, or notional principal contracts;
- tax-exempt entities, including an “individual retirement account” or “Roth IRA” retirement plan;
- regulated investment companies or real estate investment trusts;
- persons that hold the ordinary shares as part of a hedge, straddle, conversion, constructive sale or similar transaction involving more than one position;
- an entity classified as a partnership and persons that hold the ordinary shares through partnerships or certain other pass-through entities;
- holders (whether individuals, corporations or partnerships) that are treated as expatriates for some or all U.S. federal income tax purposes;
- persons who acquired the ADSs as compensation for the performance of services;
- persons holding the ADSs in connection with a trade or business conducted outside of the United States;

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## Table of Contents

- a U.S. holder who holds the ADSs through a financial account at a foreign financial institution that does not meet the requirements for avoiding withholding with respect to certain payments under Sections 1471 through 1474 of the Internal Revenue Code of 1986, as amended, or the Code;
- holders that own (or are deemed to own) 10% or more of our voting shares; and
- holders that have a “functional currency” other than the U.S. dollar.

Further, this summary does not address alternative minimum tax, gift or estate consequences or the indirect effects on the holders of equity interests in entities that own the ADSs. In addition, this discussion does not consider the U.S. tax consequences to holders of ADSs that are not “U.S. holders” (as defined below).

For the purposes of this summary, a “U.S. holder” is a beneficial owner of ordinary shares or ADSs that is (or is treated as), for U.S. federal income tax purposes:

- an individual who is either a citizen or resident of the United States;
- a corporation, or other entity that is treated as a corporation for U.S. federal income tax purposes, created or organized in or under the laws of the United States or any state of the United States or the District of Columbia;
- an estate, the income of which is subject to U.S. federal income taxation regardless of its source; or
- a trust, if a court within the United States is able to exercise primary supervision over its administration and one or more U.S. persons have the authority to control all of the substantial decisions of such trust or has a valid election in effect under applicable U.S. Treasury Regulations to be treated as a United States person.

If a partnership holds ordinary shares or ADSs, the tax treatment of a partner will generally depend upon the status of the partner and upon the activities of the partnership.

We will not seek a ruling from the U.S. Internal Revenue Service, or IRS, with regard to the U.S. federal income tax treatment of an investment in our ordinary shares or ADSs, and we cannot assure you that the IRS will agree with the conclusions set forth below.

### ***Ownership of ADSs***

For U.S. federal income tax purposes, a holder of ADSs generally will be treated as the owner of the ordinary shares represented by such ADSs. Gain or loss will generally not be recognized on account of exchanges of ordinary shares for ADSs, or of ADSs for ordinary shares. References to ordinary shares in the discussion below are deemed to include ADSs, unless context otherwise requires.

### ***Distributions***

Subject to the discussion under “*Passive Foreign Investment Company Considerations*” below, the gross amount of any distribution actually or constructively received by a U.S. holder with respect to ordinary shares will be taxable to the U.S. holder as a dividend to the extent of such U.S. holder’s pro rata share of our current and accumulated earnings and profits as determined under U.S. federal income tax principles. Distributions in excess of such pro rata share of our earnings and profits will be non-taxable to the U.S. holder to the extent of, and will be applied against and reduce, the U.S. holder’s adjusted tax basis in the ordinary shares. Distributions in excess of the sum of such pro rata share of our earnings and profits and such adjusted tax basis will generally be taxable to the U.S. holder as capital gain from the sale or exchange of property. However, since we do not calculate our earnings and profits under U.S. federal income tax principles, it is expected that any distribution will be reported as a dividend, even if that distribution would otherwise be treated as a non-taxable return of capital or as capital gain under the rules described above. The amount of any distribution of property other than cash will be the fair market value of that property on the date of distribution. A corporate U.S. holder will not be eligible for any dividends-received deduction in respect of a dividend received with respect to ordinary shares.

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## [Table of Contents](#)

Subject to the discussion below regarding the “Medicare tax,” qualified dividends received by non-corporate U.S. holders (*i.e.*, individuals and certain trusts and estates) are currently subject to a maximum income tax rate of 20%. This reduced income tax rate is applicable to dividends paid by “qualified foreign corporations” to non-corporate U.S. holders that meet the applicable requirements, including a minimum holding period (generally, at least 61 days without protection from the risk of loss during the 121-day period beginning 60 days before the ex-dividend date). A non-United States corporation (other than a corporation that is classified as a PFIC for the taxable year in which the dividend is paid or the preceding taxable year) generally will be considered to be a qualified foreign corporation (a) if it is eligible for the benefits of a comprehensive tax treaty with the United States which the Secretary of Treasury of the United States determines is satisfactory for purposes of this provision and which includes an exchange of information provision, or (b) with respect to any dividend it pays on shares of stock which are readily tradable on an established securities market in the United States. Our ADSs are listed on the NASDAQ Global Market, which is an established securities market in the United States, and we expect the ADSs to be readily tradable on the NASDAQ Global Market. However, there can be no assurance that the ADSs will be considered readily tradable on an established securities market in the United States in later years. The Company, which is incorporated under the laws of the United Kingdom, believes that it qualifies as a resident of the United Kingdom for the purposes of, and is eligible for the benefits of, the Convention between the Government of the United States of America and the Government of the United Kingdom of Great Britain and Northern Ireland for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with Respect to Taxes on Income and Capital Gains, signed on July 24, 2001, or the U.S.-U.K. Tax Treaty, although there can be no assurance in this regard. Further, the IRS has determined that the U.S.-U.K. Tax Treaty is satisfactory for purposes of the qualified dividend rules and that it includes an exchange-of-information program. Based on the foregoing, we expect to be considered a qualified foreign corporation under the Code. Accordingly, dividends paid by us to non-corporate U.S. holders with respect to shares that meet the minimum holding period and other requirements are expected to be treated as “qualified dividend income.” However, dividends paid by us will not qualify for the 20% maximum U.S. federal income tax rate if we are treated, for the tax year in which the dividends are paid or the preceding tax year, as a “passive foreign investment company” for U.S. federal income tax purposes, as discussed below.

The U.S. Treasury Department has announced its intention to issue rules regarding when and to what extent holders of ADSs will be permitted to rely on certifications from issuers to establish that dividends paid on shares to which such ADSs relate are treated as qualified dividends. Because such procedures have not yet been issued, it is not clear whether we will be able to comply with them.

Dividends received by a U.S. holder with respect to ordinary shares generally will be treated as foreign source income for the purposes of calculating that holder’s foreign tax credit limitation. For these purposes, dividends distributed by us generally will constitute “passive category income” (but, in the case of some U.S. holders, may constitute “general category income”).

### ***Sale or Other Disposition of Ordinary Shares***

A U.S. holder will generally recognize gain or loss for U.S. federal income tax purposes upon the sale or exchange of ordinary shares in an amount equal to the difference between the U.S. dollar value of the amount realized from such sale or exchange and the U.S. holder’s tax basis for those ordinary shares. Subject to the discussion under “*Passive Foreign Investment Company Considerations*” below, this gain or loss will generally be a capital gain or loss and will generally be treated as from sources within the United States. Such capital gain or loss will be treated as long-term capital gain or loss if the U.S. holder has held the ordinary shares for more than one year at the time of the sale or exchange. Long-term capital gains of non-corporate U.S. holders may be eligible for a preferential tax rate; the deductibility of capital losses is subject to limitations. For a cash basis taxpayer, units of foreign currency paid or received are translated into U.S. dollars at the spot rate on the settlement date of the purchase or sale. In that case, no foreign currency exchange gain or loss will result from currency fluctuations between the trade date and the settlement date of such a purchase or sale. An accrual basis taxpayer, however, may elect the same treatment required of cash basis taxpayers with respect to purchases and

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## [Table of Contents](#)

sales of the ADSs that are traded on an established securities market, provided the election is applied consistently from year to year. Such election may not be changed without the consent of the IRS. For an accrual basis taxpayer who does not make such election, units of foreign currency paid or received are translated into U.S. dollars at the spot rate on the trade date of the purchase or sale. Such an accrual basis taxpayer may recognize exchange gain or loss based on currency fluctuations between the trade date and settlement date. Any foreign currency gain or loss a U.S. holder realizes will be U.S. source ordinary income or loss.

### ***Medicare Tax***

An additional 3.8% tax, or “Medicare Tax”, is imposed on all or a portion of the “net investment income” (which includes taxable dividends and net capital gains, adjusted for deductions properly allocable to such dividends or net capital gains) received by (i) U.S. holders that are individuals with modified adjusted gross income of over \$200,000 (\$250,000 in the case of joint filers, \$125,000 in the case of married individuals filing separately) and (ii) certain trusts or estates.

### ***Passive Foreign Investment Company Considerations***

A corporation organized outside the United States generally will be classified as a passive foreign investment company, or PFIC, for U.S. federal income tax purposes in any taxable year in which, after applying the applicable look-through rules, either: (i) at least 75% of its gross income is passive income, or (ii) on average at least 50% of the gross value of its assets is attributable to assets that produce passive income or are held for the production of passive income. In arriving at this calculation, a pro rata portion of the income and assets of each corporation in which we own, directly or indirectly, at least a 25% interest, as determined by the value of such corporation, must be taken into account. Passive income for this purpose generally includes dividends, interest, royalties, rents and gains from commodities and securities transactions.

We believe that we were not a PFIC for any previous taxable year. Based on our estimated gross income, the average value of our gross assets, and the nature of the active businesses conducted by our “25% or greater” owned subsidiaries, we do not believe that we will be classified as a PFIC in the current taxable year. Our status for any taxable year will depend on our assets and activities in each year, and because this is a factual determination made annually after the end of each taxable year, there can be no assurance that we will not be considered a PFIC for the current taxable year or any future taxable year. The market value of our assets may be determined in large part by reference to the market price of the ADSs and our ordinary shares, which is likely to fluctuate after the offering (and may fluctuate considerably given that market prices of life sciences companies can be especially volatile). In addition, the composition of our income and assets will be affected by how, and how quickly, we spend the cash we raise in this offering.

If we were a PFIC for any taxable year during which a U.S. holder held ordinary shares, under the “default PFIC regime” (i.e., in the absence of one of the elections described below) gain recognized by the U.S. holder on a sale or other disposition (including a pledge) of the ordinary shares would be allocated ratably over the U.S. holder’s holding period for the ordinary shares. The amounts allocated to the taxable year of the sale or other disposition and to any year before we became a PFIC would be taxed as ordinary income. The amount allocated to each other taxable year would be subject to tax at the highest rate in effect for individuals or corporations, as appropriate, for that taxable year, and an interest charge would be imposed on the resulting tax liability for that taxable year. Similar rules would apply to the extent any distribution in respect of ordinary shares exceeds 125% of the average of the annual distributions on ordinary shares received by a U.S. holder during the preceding three years or the holder’s holding period, whichever is shorter.

In the event we were treated as a PFIC, the tax consequences under the default PFIC regime described above could be avoided by either a “mark-to-market” or “qualified electing fund” election. A U.S. holder making a mark-to-market election (if the eligibility requirements for such an election were satisfied) generally would not be subject to the PFIC rules discussed above, except with respect to any portion of the holder’s holding period



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## [Table of Contents](#)

that preceded the effective date of the election. Instead, the electing holder would include in ordinary income, for each taxable year in which we were a PFIC, an amount equal to any excess of (a) the fair market value of the ordinary shares as of the close of such taxable year over (b) the electing holder's adjusted tax basis in such ordinary shares. In addition, an electing holder would be allowed a deduction in an amount equal to the lesser of (a) the excess, if any, of (i) the electing holder's adjusted tax basis in the ordinary shares over (ii) the fair market value of such ordinary shares as of the close of such taxable year or (b) the excess, if any, of (i) the amount included in ordinary income because of the election for prior taxable years over (ii) the amount allowed as a deduction because of the election for prior taxable years. The election would cause adjustments in the electing holder's tax basis in the ordinary shares to reflect the amount included in gross income or allowed as a deduction because of the election. In addition, upon a sale or other taxable disposition of ordinary shares, an electing holder would recognize ordinary income or loss (not to exceed the excess, if any, of (a) the amount included in ordinary income because of the election for prior taxable years over (b) the amount allowed as a deduction because of the election for prior taxable years).

Alternatively, a U.S. holder making a valid and timely "QEF election" generally would not be subject to the default PFIC regime discussed above. Instead, for each PFIC year to which such an election applied, the electing holder would be subject to U.S. federal income tax on the electing holder's pro rata share of our net capital gain and ordinary earnings, regardless of whether such amounts were actually distributed to the electing holder. However, because we do not intend to prepare or provide the information that would permit the making of a valid QEF election, that election will not be available to U.S. holders.

If we were considered a PFIC for the current taxable year or any future taxable year, a U.S. holder would be required to file annual information returns for such year, whether or not the U.S. holder disposed of any ordinary shares or received any distributions in respect of ordinary shares during such year.

### ***Backup Withholding and Information Reporting***

U.S. holders generally will be subject to information reporting requirements with respect to dividends on ordinary shares and on the proceeds from the sale, exchange or disposition of ordinary shares that are paid within the United States or through U.S.-related financial intermediaries, unless the U.S. holder is an "exempt recipient." In addition, U.S. holders may be subject to backup withholding (at a 28% rate) on such payments, unless the U.S. holder provides a taxpayer identification number and a duly executed IRS Form W-9 or otherwise establishes an exemption. Backup withholding is not an additional tax, and the amount of any backup withholding will be allowed as a credit against a U.S. holder's U.S. federal income tax liability and may entitle such holder to a refund, provided that the required information is timely furnished to the IRS.

### ***Foreign Account Tax Compliance Act, or FATCA, and Related Provisions***

Under certain circumstances, the Company or its paying agent may be required, pursuant to the FATCA provisions of the Code (or analogous provisions of non-U.S. law) and regulations or pronouncements thereunder, any "intergovernmental agreement" entered into pursuant to those provisions or any U.S. or non-U.S. fiscal or regulatory legislation, rules, guidance notes or practices adopted pursuant to any such agreement, to withhold U.S. tax at a rate of 30% on all or a portion of payments of dividends or other corporate distributions which are treated as "foreign pass-thru payments" made on or after January 1, 2017, if such payments are not exempt from such withholding. The Company believes, and this discussion assumes, that the Company is not a "foreign financial institution" for purposes of FATCA. The rules regarding FATCA and "foreign pass-thru payments," including the treatment of proceeds from the disposition of ordinary shares, are not completely clear, and further guidance may be issued by the IRS that would clarify how FATCA might apply to dividends or other amounts paid on or with respect to ordinary shares.

### ***Foreign Asset Reporting***

In addition, certain individuals who are U.S. Holders may be required to file IRS Form 8938 to report the ownership of "specified foreign financial assets" if the total value of those assets exceeds an applicable threshold

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## [Table of Contents](#)

amount (subject to certain exceptions). For these purposes, a specified foreign financial asset may include not only a financial account (as defined for these purposes) maintained by a non-U.S. financial institution, but also stock or securities issued by a non-U.S. corporation (such as the Company). Certain U.S. entities may also be required to file IRS Form 8938 in the future.

### **F. Dividends and Paying Agents**

Not applicable.

### **G. Statement by Experts**

Not applicable.

### **H. Documents on Display**

We are subject to the informational requirements of the Exchange Act. Accordingly, we are required to file reports and other information with the SEC, including annual reports on Form 20-F and reports on Form 6-K. You may inspect and copy reports and other information filed with the SEC at the Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. Information on the operation of the Public Reference Room may be obtained by calling the SEC at 1-800-SEC-0330. In addition, the SEC maintains an Internet website that contains reports and other information about issuers, like us, that file electronically with the SEC. The address of that website is [www.sec.gov](http://www.sec.gov).

We also make available on our website, free of charge, our Annual Report and the text of our reports on Form 6-K, including any amendments to these reports, as well as certain other SEC filings, as soon as reasonably practicable after they are electronically filed with or furnished to the SEC. Our website address is "[www.summitplc.com](http://www.summitplc.com)." The information contained on our website is not incorporated by reference in this Annual Report.

### **Item 11: Quantitative and Qualitative Disclosures About Market Risk**

Our activities expose us to a variety of financial risks: foreign currency risk, interest rate risk, credit risk and liquidity risk. Our principal financial instrument comprises cash and cash equivalents, and this is used to finance our operations. We have various other financial instruments such as trade receivables and payables that arise directly from our operations. The category of loans and receivables contains only trade and other receivables, shown on the face of the balance sheet, all of which mature within one year. We have compared fair value to book value for each class of financial asset and liability and no difference was identified. We have a policy, which has been consistently followed, of not trading in financial instruments.

#### **Foreign Currency Risk**

Foreign currency risk refers to the risk that the value of a financial commitment or recognized asset or liability will fluctuate due to changes in foreign currency rates. Our net income and financial position, as expressed in pounds sterling, are exposed to movements in foreign exchange rates against the U.S. dollar and the euro. The main trading currencies are pounds sterling, the U.S. dollar, and the euro. We are exposed to foreign currency risk as a result of operating transactions, capital raises in the United States and the translation for foreign bank accounts. We monitor our exposure to foreign exchange risk. Exposures are generally managed through natural hedging via the currency denomination of cash balances and any impact currently is not material to us.

#### **Interest Rate Risk**

We do not hold any derivative instruments to manage interest rate risk.

#### **Credit Risk**

Our credit risk with respect to customers is limited and we did not have any trade receivables outstanding as of January 31, 2016. Financial instruments that potentially expose us to concentrations of credit risk consist primarily of short-term cash investments and trade accounts receivable.

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[Table of Contents](#)

**Liquidity Risk**

We have funded our operations since inception primarily through the issuance of equity securities. We have also received funding from philanthropic, non-government and not for profit organizations and patient advocacy groups and grant funding from government entities. Until such time as we can generate significant revenue from product sales, if ever, we expect to finance our operations through a combination of public or private equity or debt financings or other sources. Adequate additional financing may not be available to us on acceptable terms, or at all. Our inability to raise capital as and when needed would have a negative impact on our financial condition and our ability to pursue our business strategy.

**Item 12: Description of Securities other than Equity Securities**

**A. Debt Securities.**

Not applicable.

**B. Warrants and Rights.**

Not applicable.

**C. Other Securities.**

Not applicable.

**D. American Depositary Shares.**

**Fees and Expenses**

The following table shows the fees and charges that a holder of our ADSs may have to pay, either directly or indirectly. The majority of these costs are set by the depository and are subject to change:

**Persons depositing or withdrawing shares or ADS holders must pay:**

\$5.00 (or less) per 100 ADSs (or portion of 100 ADSs)

\$.05 (or less) per ADS

A fee equivalent to the fee that would be payable if securities distributed to you had been shares and the shares had been deposited for issuance of ADSs

\$.05 (or less) per ADS per calendar year

Registration or transfer fees

Expenses of the depository

Taxes and other governmental charges the depository or the custodian has to pay on any ADSs or shares underlying ADSs, such as stock transfer taxes, stamp duty or withholding taxes

Any charges incurred by the depository or its agents for servicing the deposited securities

**For:**

Issuance of ADSs, including issuances resulting from a distribution of shares or rights or other property  
Cancellation of ADSs for the purpose of withdrawal, including if the deposit agreement terminates

Any cash distribution to ADS holders

Distribution of securities distributed to holders of deposited securities (including rights) that are distributed by the depository to ADS holders

Depository services

Transfer and registration of shares on our share register to or from the name of the depository or its agent when you deposit or withdraw shares

Cable, telex and facsimile transmissions (when expressly provided in the deposit agreement)

Converting foreign currency to U.S. dollars

As necessary

As necessary

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[Table of Contents](#)

The depositary collects its fees for delivery and surrender of ADSs directly from investors depositing shares or surrendering ADSs for the purpose of withdrawal or from intermediaries acting for them. The depositary collects fees for making distributions to investors by deducting those fees from the amounts distributed or by selling a portion of distributable property to pay the fees. The depositary may collect its annual fee for depositary services by deduction from cash distributions or by directly billing investors or by charging the book-entry system accounts of participants acting for them. The depositary may collect any of its fees by deduction from any cash distribution payable (or by selling a portion of securities or other property distributable) to ADS holders that are obligated to pay those fees. The depositary may generally refuse to provide fee-attracting services until its fees for those services are paid.

From time to time, the depositary may make payments to us to reimburse us for costs and expenses generally arising out of establishment and maintenance of the ADS program, waive fees and expenses for services provided to us by the depositary or share revenue from the fees collected from ADS holders. In performing its duties under the deposit agreement, the depositary may use brokers, dealers or other service providers that are affiliates of the depositary and that may earn or share fees or commissions.

**Payment of Taxes**

You will be responsible for any taxes or other governmental charges payable on your ADSs or on the deposited securities represented by any of your ADSs. The depositary may refuse to register any transfer of your ADSs or allow you to withdraw the deposited securities represented by your ADSs until those taxes or other charges are paid. It may apply payments owed to you or sell deposited securities represented by your American Depositary Shares to pay any taxes owed and you will remain liable for any deficiency. If the depositary sells deposited securities, it will, if appropriate, reduce the number of ADSs to reflect the sale and pay to ADS holders any proceeds, or send to ADS holders any property, remaining after it has paid the taxes.

**PART II**

**Item 13: Defaults, Dividend Arrearages and Delinquencies**

None.

**Item 14: Material Modifications to the Rights of Security Holders and Use of Proceeds**

- A. Not applicable.
- B. Not applicable.
- C. Not applicable.
- D. Not applicable.
- E. **Use of Proceeds**

We effected the initial public offering, or IPO, of our American Depositary Shares, or ADSs, each representing five of our ordinary shares, through a Registration Statement on Form F-1 (File No. 333-201807) that was declared effective by the Securities and Exchange Commission on March 4, 2015. On March 10, 2015, we completed the sale of 3,450,000 ADSs in our IPO at a price to the public of \$9.90 per share, resulting in net proceeds to us of \$28.0 million after deducting underwriting discounts and commissions of \$2.4 million and offering expenses of \$3.8 million. In addition, we granted the underwriters a 30-day option to purchase up to 517,500 additional ADSs to cover over allotments, at the public offering price, less the underwriting discount. On March 18, 2015, we completed the additional sale of 517,500 ADSs under this option at a price to the public of \$9.90 per share, resulting in net proceeds to us of \$4.8 million after deducting underwriting discounts and commissions of \$0.4 million. The offering commenced on March 4, 2015 and did not terminate until we had completed the sale of all of the securities registered in the offering. None of the underwriting discounts and commissions or other offering expenses were paid to directors or officers of ours or their associates or to persons owning 10% or more of any class of our equity securities or to any affiliates of ours. JMP Securities LLC, Oppenheimer & Co. Inc. and Needham & Company, LLC were the underwriters for our IPO.

We received proceeds of approximately \$32.7 million from our IPO, net of underwriting discounts and commissions and the expenses described above. As of January 31, 2016, we have used approximately \$11.0 million of the net proceeds as follows:

- approximately \$7.0 million to advance our DMD activities including our Phase 1b modified diet clinical trial, our PhaseOut DMD clinical trial and our pipeline of future generation utrophin modulators; and
- approximately \$4.0 million to advance our Phase 2 clinical trial of ridinilazole and our ongoing exploratory Phase 2 clinical trial of ridinilazole compared to fidaxomicin.

There has been no material change in our planned use of the net proceeds from our IPO as described in our final prospectus filed with the Securities and Exchange Commission pursuant to Rule 424(b)(4) on March 5, 2015. Our management retains broad discretion in the allocation and use of the remaining net proceeds of our initial public offering. Pending such decisions, we have deposited such proceeds with reputable U.K.- and U.S.-based banking institutions.

**Item 15: Controls and Procedures.**

**A. Disclosure Controls and Procedures.**

We have carried out an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures (as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) under the supervision and the participation of the company's management, which is responsible for the management of the

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## [Table of Contents](#)

internal controls, and which includes our Chief Executive Officer and Chief Financial Officer (our principal executive officer and principal financial officer, respectively). The term “disclosure controls and procedures,” as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Securities Exchange Act of 1934 is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission’s rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Securities Exchange Act of 1934 is accumulated and communicated to the company’s management, including its principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure. There are inherent limitations to the effectiveness of any system of disclosure controls and procedures, including the possibility of human error and the circumvention or overriding of the controls and procedures. Accordingly, even effective disclosure controls and procedures can only provide reasonable assurance of achieving their control objectives. Based upon our evaluation of our disclosure controls and procedures as of January 31, 2016, our Chief Executive Officer and Chief Financial Officer concluded that, as of such date, our disclosure controls and procedures were effective at a reasonable level of assurance.

### **B. Management’s Annual Report on Internal Control over Financial Reporting**

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Our internal control over financial reporting is a process designed, under the supervision of the Chief Executive Officer and the Chief Financial Officer, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of our financial statements for external reporting purposes in accordance with International Financial Reporting Standards.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect all misstatements. Moreover, projections of any evaluation of the effectiveness of internal control to future periods are subject to a risk that controls may become inadequate because of changes in conditions and that the degree of compliance with the policies or procedures may deteriorate.

Our management has assessed the effectiveness of internal control over financial reporting as of January 31, 2016 based on the Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) 2013. Based on this assessment, our management has concluded that our internal control over financial reporting as of January 31, 2016 was effective.

### **C. Attestation Report of the Registered Public Accounting Firm**

This report does not include an attestation report of our registered public accounting firm as we are an emerging growth company.

### **D. Changes in Internal Control Over Financial Reporting**

No change in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) occurred during the fiscal year ended January 31, 2016 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

### **Item 16A: Audit Committee Financial Expert**

The members of our audit committee are Mr. Wurzer, Dr. Price and Ms. Andrews. Mr. Wurzer is the chair of the audit committee. Each of our Audit Committee Members satisfies the independence requirements of Rule 5605(a)(2) of the Nasdaq Stock Market Marketplace Rules and the independence requirements of Rule 10A-3(b)(1) under the Exchange Act. Our board of directors has determined that Mr. Wurzer is an “audit committee financial expert” as defined in Item 16A of Form 20-F.

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[Table of Contents](#)

**Item 16B: Code of Ethics**

Our Code of Business Conduct and Ethics is applicable to all of our employees, officers and directors and is available on our website at <http://www.summitplc.com>. Our Code of Business Conduct and Ethics provides that our directors and officers are expected to avoid any action, position or interest that conflicts with the interests of our company or gives the appearance of a conflict. Our directors and officers have an obligation under our Code of Business Conduct and Ethics to advance our company's interests when the opportunity to do so arises. We expect that any amendment to this code, or any waivers of its requirements, will be disclosed on our website. Information contained on, or that can be accessed through, our website is not incorporated by reference into this document, and you should not consider information on our website to be part of this document.

**Item 16C: Principal Accountant Fees and Services**

The following table sets forth, for each of the years indicated, the aggregate fees billed to us for services rendered by PricewaterhouseCoopers LLP, our independent registered public accounting firm.

	Year Ended January 31,	
	2016	2015
	(in thousands)	
Audit Fees	£ 115	£ 77
Audit-Related Fees(1)	164	740
Tax Fees(2)	20	17
All Other Fees(3)	—	—
Total	<u>£ 299</u>	<u>£ 834</u>

- (1) Fees for the performance of assurance reporting on historical information included in the registration statement that was filed with the Securities and Exchange Commission for our initial public offering in the United States and other audit related assurance services.
- (2) Fees relate to the aggregated fees for services rendered on tax compliance, tax advice and tax planning.
- (3) No fees incurred in this category.

**Item 16D: Exemptions from the Listing Standards for Audit Committees**

Not applicable.

**Item 16E: Purchases of Equity Securities by the Issuer and Affiliated Purchasers.**

Not applicable.

**Item 16F: Change in Registrant's Certifying Accountant**

Not applicable.

**Item 16G: Corporate Governance**

The Sarbanes-Oxley Act of 2002, as well as related rules subsequently implemented by the SEC, requires foreign private issuers, including our company, to comply with various corporate governance practices. In addition, NASDAQ rules provide that foreign private issuers may follow home country practice in lieu of the NASDAQ corporate governance standards, subject to certain exceptions and except to the extent that such exemptions would be contrary to U.S. federal securities laws. The home country practices followed by our company in lieu of NASDAQ rules are described below:

- We do not follow NASDAQ's quorum requirements applicable to meetings of shareholders. Such quorum requirements are not required under U.K. law. In accordance with generally accepted business practice, our articles of association provide alternative quorum requirements that are generally applicable to meetings of shareholders.
- We do not follow NASDAQ's requirements that non-management directors meet on a regular basis without management present. Our board of directors may choose to meet in executive session at their discretion.
- We do not follow NASDAQ's requirements to seek shareholder approval for the implementation of certain equity compensation plans, the issuances of ordinary shares under such plans, or in connection with certain private placements of equity securities. In accordance with U.K. law, we are not required to seek shareholder approval to allot ordinary shares in connection with applicable employee equity compensation plans. We will follow U.K. law with respect to any requirement to obtain shareholder approval prior to any private placements of equity securities.

We intend to take all actions necessary for us to maintain compliance as a foreign private issuer under the applicable corporate governance requirements of the Sarbanes-Oxley Act of 2002, the rules adopted by the SEC and NASDAQ's listing standards.

Because we are a foreign private issuer, our directors and senior management are not subject to short-swing profit and insider trading reporting obligations under Section 16 of the U.S. Securities Exchange Act of 1934, as amended, or Exchange Act. They are, however, subject to the obligations to report changes in share ownership under Section 13 of the Exchange Act and related SEC rules.

**Item 16H: Mine Safety Disclosure**

Not applicable.



**PART III**

**Item 17: Financial Statements**

We have elected to provide financial statements pursuant to Item 18.

**Item 18: Financial Statements**

The financial statements are filed as part of this Annual Report beginning on page F-1.

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[Table of Contents](#)

**Item 19: Exhibits**

<u>Exhibit No.</u>	<u>Description</u>
1.1	Articles of Association of Summit Therapeutics plc (incorporated by reference to Exhibit 3.1 to the Company's Registration Statement on Form F-1 (File No. 333-201807), as amended, filed with the Securities and Exchange Commission on February 20, 2015)
2.1	Specimen certificate evidencing ordinary shares of Summit Therapeutics plc (incorporated by reference to Exhibit 4.5 to the Company's Registration Statement on Form F-1 (File No. 333-201807), filed with the Securities and Exchange Commission on January 30, 2015)
2.2	Form of Deposit Agreement among Summit Therapeutics plc, The Bank of New York Mellon, as depositary, and all Owners and Holders of ADSs issued thereunder (incorporated by reference to Exhibit 4.1 to the Company's Registration Statement on Form F-1 (File No. 333-201807), as amended, filed with the Securities and Exchange Commission on February 20, 2015)
2.3	Form of American Depositary Receipt (included in Exhibit 2.2) (incorporated by reference to Exhibit 4.2 to the Company's Registration Statement on Form F-1 (File No. 333-201807), as amended, filed with the Securities and Exchange Commission on February 20, 2015)
2.4	Warrant Instrument, dated April 4, 2012, creating warrant to subscribe for shares in Summit Therapeutics plc issued to Singer Capital Markets Limited (incorporated by reference to Exhibit 4.3 to the Company's Registration Statement on Form F-1 (File No. 333-201807), filed with the Securities and Exchange Commission on January 30, 2015)
2.5	Warrant Instrument, dated November 22, 2013, relating to Warrants in Registered Form to Subscribe for Ordinary Shares in Summit Therapeutics plc (incorporated by reference to Exhibit 4.4 to the Company's Registration Statement on Form F-1 (File No. 333-201807), filed with the Securities and Exchange Commission on January 30, 2015)
4.1†	Grant Agreement, entered into as of December 15, 2011, by and between Duchenne Partners Fund and Summit Therapeutics plc (incorporated by reference to Exhibit 10.1 to the Company's Registration Statement on Form F-1 (File No. 333-201807), filed with the Securities and Exchange Commission on January 30, 2015)
4.2†	MDA Venture Philanthropy Grant Contract, entered into as of December 15, 2011, by and between Muscular Dystrophy Association, Inc. and Summit Therapeutics plc (incorporated by reference to Exhibit 10.2 to the Company's Registration Statement on Form F-1 (File No. 333-201807), filed with the Securities and Exchange Commission on January 30, 2015)
4.3†	Translation Award Funding Agreement, entered into as of October 19, 2012, by and between the Wellcome Trust Limited and Summit Therapeutics plc (incorporated by reference to Exhibit 10.3 to the Company's Registration Statement on Form F-1 (File No. 333-201807), as amended, filed with the Securities and Exchange Commission on February 27, 2015)
4.4†	Agreement for the Sponsorship of a Research Programme, dated November 22, 2013, by and between The Chancellor Masters and Scholars of the University of Oxford; Isis Innovation Limited; and Summit Therapeutics plc (incorporated by reference to Exhibit 10.4 to the Company's Registration Statement on Form F-1 (File No. 333-201807), filed with the Securities and Exchange Commission on January 30, 2015)
4.5†	Deed of Licence of Know-How, dated November 22, 2013, by and between Isis Innovation Limited and MuOx Limited (incorporated by reference to Exhibit 10.5 to the Company's Registration Statement on Form F-1 (File No. 333-201807), filed with the Securities and Exchange Commission on January 30, 2015)

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[Table of Contents](#)

<u>Exhibit No.</u>	<u>Description</u>
4.6†	Supplemental Variation Deed, dated July 24, 2014, by and between Isis Innovation Limited and MuOx Limited (incorporated by reference to Exhibit 10.6 to the Company's Registration Statement on Form F-1 (File No. 333-201807), filed with the Securities and Exchange Commission on January 30, 2015)
4.7†	Option Agreement, dated November 22, 2013, by and between The Chancellor Masters and Scholars of the University of Oxford, Isis Innovation Limited and Summit Therapeutics plc (incorporated by reference to Exhibit 10.7 to the Company's Registration Statement on Form F-1 (File No. 333-201807), filed with the Securities and Exchange Commission on January 30, 2015)
4.8†	Variation Agreement, dated July 16, 2014, by and between The Chancellor Masters and Scholars of the University of Oxford, Isis Innovation Limited and Summit Therapeutics plc (incorporated by reference to Exhibit 10.8 to the Company's Registration Statement on Form F-1 (File No. 333-201807), filed with the Securities and Exchange Commission on January 30, 2015)
4.9	Lease, dated June 21, 2013, by and between MEPC Milton Park No. 1 Limited and MEPC Milton Park No. 2 Limited on behalf of MEPC Milton LP and Summit Therapeutics plc (incorporated by reference to Exhibit 10.9 to the Company's Registration Statement on Form F-1 (File No. 333-201807), filed with the Securities and Exchange Commission on January 30, 2015)
4.10	Service Agreement, effective as of January 14, 2015, by and between Cambridge Innovation Center and Summit Therapeutics Inc. (incorporated by reference to Exhibit 10.10 to the Company's Registration Statement on Form F-1 (File No. 333-201807), as amended, filed with the Securities and Exchange Commission on February 20, 2015)
4.11	2005 Enterprise Management Incentive Scheme (incorporated by reference to Exhibit 10.11 to the Company's Registration Statement on Form F-1 (File No. 333-201807), filed with the Securities and Exchange Commission on January 30, 2015)
4.12	Letter of Appointment, dated November 20, 2014, by and between Summit Therapeutics Inc. and Valerie Andrews (incorporated by reference to Exhibit 10.12 to the Company's Registration Statement on Form F-1 (File No. 333-201807), filed with the Securities and Exchange Commission on January 30, 2015)
4.13	Letter of Appointment, dated November 21, 2012, by and between Summit Therapeutics plc and Frank Armstrong (incorporated by reference to Exhibit 10.13 to the Company's Registration Statement on Form F-1 (File No. 333-201807), filed with the Securities and Exchange Commission on January 30, 2015)
4.14	Letter of Appointment, dated December 19, 2013, by and between Summit Therapeutics plc and Stephen Davies (incorporated by reference to Exhibit 10.14 to the Company's Registration Statement on Form F-1 (File No. 333-201807), filed with the Securities and Exchange Commission on January 30, 2015)
4.15	Letter of Appointment, dated August 8, 2013, by and between Summit Therapeutics plc and Barry Price (incorporated by reference to Exhibit 10.15 to the Company's Registration Statement on Form F-1 (File No. 333-201807), filed with the Securities and Exchange Commission on January 30, 2015)
4.16	Letter of Appointment, dated April 16, 2014, by and between Summit Therapeutics plc and Leopoldo Zambelletti (incorporated by reference to Exhibit 10.16 to the Company's Registration Statement on Form F-1 (File No. 333-201807), filed with the Securities and Exchange Commission on January 30, 2015)

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[Table of Contents](#)

<u>Exhibit No.</u>	<u>Description</u>
4.17	Letter of Appointment, dated February 18, 2015, by and between Summit Therapeutics plc and David Wurzer (incorporated by reference to Exhibit 10.17 to the Company's Registration Statement on Form F-1 (File No. 333-201807), as amended, filed with the Securities and Exchange Commission on February 20, 2015)
4.18	Form of Deed of Indemnity (incorporated by reference to Exhibit 10.18 to the Company's Registration Statement on Form F-1 (File No. 333-201807), as amended, filed with the Securities and Exchange Commission on February 20, 2015)
4.19*	Deed of Variation, dated November 16, 2015, relating to the Warrant Instrument, dated November 22, 2013
4.20*+	Variation Agreement, dated November 16, 2015, relating to the Option Agreement, dated November 22, 2013, by and between the University of Oxford, Isis Innovation Limited and Summit Therapeutics plc
4.21*+	Second Variation Agreement, dated November 16, 2015, relating to the Agreement for the Sponsorship of a Research Programme, dated November 22, 2013, by and between the Chancellor Masters and Scholars of the University of Oxford, Isis Innovation Limited and Summit Therapeutics plc
4.22*	2016 Long Term Incentive Plan
8.1*	Subsidiaries of Summit Therapeutics plc
12.1*	Certification of Chief Executive Officer pursuant to Securities Exchange Act Rules 13a-14(a) and 15d-14(a) as adopted pursuant to §302 of the Sarbanes-Oxley Act of 2002
12.2*	Certification of Chief Financial Officer pursuant to Securities Exchange Act Rules 13a-14(a) and 15d-14(a) as adopted pursuant to §302 of the Sarbanes-Oxley Act of 2002
13.1*	Certification of Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002

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\* Filed herewith.

† Confidential treatment has been granted as to certain portions of the exhibit. Confidential materials omitted and filed separately with the Securities and Exchange Commission.

+ Confidential treatment has been requested as to certain portions of the exhibit. Confidential materials omitted and filed separately with the Securities and Exchange Commission.

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[Table of Contents](#)

**SIGNATURES**

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this annual report on its behalf.

**SUMMIT THERAPEUTICS PLC**

By: /s/ Glyn Edwards

Name: Glyn Edwards

Title: Chief Executive Officer

Date: May 11, 2016

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[Table of Contents](#)

**SUMMIT THERAPEUTICS PLC**

**Index to Financial Statements**

<a href="#">Consolidated Statement of Financial Position as at January 31, 2016 and 2015</a>	F-3
<a href="#">Consolidated Statement of Comprehensive Income for the years ended January 31, 2016, 2015 and 2014</a>	F-4
<a href="#">Consolidated Statement of Cash Flows for the years ended January 31, 2016, 2015 and 2014</a>	F-5
<a href="#">Consolidated Statement of Changes in Equity for the years ended January 31, 2016, 2015 and 2014</a>	F-6
<a href="#">Notes to the Financial Statements</a>	F-8



**Report of Independent Registered Public Accounting Firm**

To the board of directors and shareholders of Summit Therapeutics plc:

In our opinion, the accompanying consolidated statement of financial position and the related consolidated statements of comprehensive income, cash flows, and changes in equity present fairly, in all material respects, the financial position of Summit Therapeutics plc and its subsidiaries at January 31, 2016 and January 31, 2015, and the results of their operations and their cash flows for each of the three years in the period ended January 31, 2016, in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

As discussed in Note 1 to the consolidated financial statements, the Company has incurred significant losses and negative cash flows from operations since inception, has an accumulated deficit, and has limited cash resources. Management's plans in regard to these matters are also described in Note 1.

/s/ PricewaterhouseCoopers LLP  
**PricewaterhouseCoopers LLP, UK**  
**May 10, 2016**

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*PricewaterhouseCoopers LLP, 3 Forbury Place, 23 Forbury Road, Reading, Berkshire, RG1 3JH*

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[Table of Contents](#)**Consolidated Statement of Financial Position**

At January 31, 2016 and 2015

	Note	January 31, 2016 £000	January 31, 2015 £000
<b>ASSETS</b>			
<b>Non-current assets</b>			
Goodwill	10	664	664
Intangible assets	11	3,473	3,483
Property, plant and equipment	12	83	55
		<u>4,220</u>	<u>4,202</u>
<b>Current assets</b>			
Prepayments and other receivables	13	1,538	2,630
Current tax receivable		3,014	1,299
Cash and cash equivalents		16,304	11,265
		<u>20,856</u>	<u>15,194</u>
<b>Total assets</b>		<u>25,076</u>	<u>19,396</u>
<b>LIABILITIES</b>			
<b>Non-current liabilities</b>			
Provision for other liabilities and charges	16	(73)	(45)
Deferred tax liability	17	(664)	(664)
		<u>(737)</u>	<u>(709)</u>
<b>Current liabilities</b>			
Trade and other payables	14	(3,206)	(3,721)
<b>Total liabilities</b>		<u>(3,943)</u>	<u>(4,430)</u>
<b>Net assets</b>		<u>21,133</u>	<u>14,966</u>
<b>EQUITY</b>			
Share capital	18	613	411
Share premium account		46,035	24,101
Share-based payment reserve		3,757	2,597
Merger reserve		(1,943)	(1,943)
Special reserve		19,993	19,993
Currency translation reserve		21	62
Accumulated losses reserve		(47,343)	(30,255)
<b>Total equity</b>		<u>21,133</u>	<u>14,966</u>

The accompanying notes form an integral part of these Consolidated Financial Statements.



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[Table of Contents](#)**Consolidated Statement of Comprehensive Income**

For the years ended January 31, 2016, 2015 and 2014

	Note	Year ended January 31, 2016 £000	Year ended January 31, 2015 £000	Year ended January 31, 2014 £000
<b>Other operating income</b>	6	1,451	2,148	1,844
<b>Operating expenses</b>				
Research and development	6	(16,856)	(10,417)	(6,611)
General and administration	6	(4,771)	(4,442)	(1,942)
<b>Total operating expenses</b>		<b>(21,627)</b>	<b>(14,859)</b>	<b>(8,553)</b>
<b>Operating loss</b>		<b>(20,176)</b>	<b>(12,711)</b>	<b>(6,709)</b>
<b>Finance income</b>		<b>30</b>	<b>51</b>	<b>9</b>
<b>Loss before income tax</b>		<b>(20,146)</b>	<b>(12,660)</b>	<b>(6,700)</b>
<b>Income tax</b>	8	<b>3,058</b>	<b>1,297</b>	<b>607</b>
<b>Loss for the year</b>		<b>(17,088)</b>	<b>(11,363)</b>	<b>(6,093)</b>
<b>Other comprehensive (loss) / income</b>				
Exchange differences on translating foreign operations		(41)	62	—
<b>Total comprehensive loss</b>		<b>(17,129)</b>	<b>(11,301)</b>	<b>(6,093)</b>
<b>Basic and diluted loss per Ordinary Share from continuing operations</b>	9	<b>(29)p</b>	<b>(29)p</b>	<b>(30)p</b>

The accompanying notes form an integral part of these Consolidated Financial Statements.

[Table of Contents](#)

**Consolidated Statement of Cash Flows**

For the years ended January 31, 2016, 2015 and 2014

	Note	Year ended January 31, 2016 £000s	Year ended January 31, 2015 £000s	Year ended January 31, 2014 £000s
<b>Cash flows from operating activities</b>				
Loss before income tax		(20,146)	(12,660)	(6,700)
		(20,146)	(12,660)	(6,700)
Adjusted for:				
Finance income		(30)	(51)	(9)
Foreign exchange (gain)/loss		(169)	78	18
Depreciation	12	38	23	17
Amortisation of intangible fixed assets	11	10	10	9
Profit on disposal of property, plant and equipment		—	—	(14)
Movement in provisions	16	28	28	(133)
Research and development expenditure credit		(44)	(39)	(29)
Share-based payment		1,160	961	226
<b>Adjusted loss from operations before changes in working capital and provisions</b>		<b>(19,153)</b>	<b>(11,650)</b>	<b>(6,615)</b>
Decrease/(Increase) in prepayments and other receivables		1,106	(2,200)	(65)
(Decrease)/Increase in trade and other payables		(536)	1,867	465
<b>Cash used by operations</b>		<b>(18,583)</b>	<b>(11,983)</b>	<b>(6,215)</b>
Taxation received		1,401	658	346
<b>Net cash used in operating activities</b>		<b>(17,182)</b>	<b>(11,325)</b>	<b>(5,869)</b>
<b>Investing activities</b>				
Proceeds from disposal of property, plant and equipment		—	—	102
Purchase of property, plant and equipment		(66)	(35)	(37)
Purchase of intangible assets		—	—	(10)
Interest received		30	51	9
<b>Net cash (used) / generated by investing activities</b>		<b>(36)</b>	<b>16</b>	<b>64</b>
<b>Financing activities</b>				
Proceeds from issue of share capital		26,101	22,000	4,663
Transaction costs on share capital issued		(4,187)	(1,482)	(207)
Exercise of share options		222	26	—
<b>Net cash generated from financing activities</b>		<b>22,136</b>	<b>20,544</b>	<b>4,456</b>
<b>Increase in cash and cash equivalents</b>		<b>4,918</b>	<b>9,235</b>	<b>(1,349)</b>
<b>Effect of exchange rates in cash and cash equivalents</b>		<b>121</b>	<b>—</b>	<b>—</b>
<b>Cash and cash equivalents at beginning of year</b>		<b>11,265</b>	<b>2,030</b>	<b>3,379</b>
<b>Cash and cash equivalents at end of year</b>		<b>16,304</b>	<b>11,265</b>	<b>2,030</b>

The accompanying notes form an integral part of these Consolidated Financial Statements.

[Table of Contents](#)

**Consolidated Statement of Changes in Equity**

For the years ended January 31, 2016, 2015 and 2014

**Year ended January 31, 2016**

<b>Group</b>	<b>Share capital £000s</b>	<b>Share premium account £000s</b>	<b>Share-based payment reserve £000s</b>	<b>Merger reserve £000s</b>	<b>Special reserve £000s</b>	<b>Currency translation reserve £000s</b>	<b>Accumulated losses reserve £000s</b>	<b>Total £000s</b>
At February 1, 2015	411	24,101	2,597	(1,943)	19,993	62	(30,255)	14,966
Loss for the year from continuing operations	—	—	—	—	—	—	(17,088)	(17,088)
Currency translation adjustment	—	—	—	—	—	(41)	—	(41)
Total comprehensive loss for the year	—	—	—	—	—	(41)	(17,088)	(17,129)
New share capital issued	198	25,903	—	—	—	—	—	26,101
Transaction costs on share capital issued	—	(4,187)	—	—	—	—	—	(4,187)
Share options exercised	4	218	—	—	—	—	—	222
Share-based payment	—	—	1,160	—	—	—	—	1,160
At January 31, 2016	<u>613</u>	<u>46,035</u>	<u>3,757</u>	<u>(1,943)</u>	<u>19,993</u>	<u>21</u>	<u>(47,343)</u>	<u>21,133</u>

**Year ended January 31, 2015**

<b>Group</b>	<b>Share capital £000s</b>	<b>Share premium account £000s</b>	<b>Share-based payment reserve £000s</b>	<b>Merger reserve £000s</b>	<b>Special reserve £000s</b>	<b>Currency translation reserve £000s</b>	<b>Accumulated losses reserve £000s</b>	<b>Total £000s</b>
At February 1, 2014	10,075	40,177	1,636	(1,943)	—	—	(45,183)	4,762
Loss for the year from continuing operations	—	—	—	—	—	—	(11,363)	(11,363)
Currency translation adjustment	—	—	—	—	—	62	—	62
Total comprehensive loss for the year	—	—	—	—	—	62	(11,363)	(11,301)
New share capital issued	3,384	18,616	—	—	—	—	—	22,000
Transaction costs on share capital issued	—	(1,482)	—	—	—	—	—	(1,482)
Cancellation of Deferred Shares	(13,048)	—	—	—	13,048	—	—	—
Reduction of share premium account	—	(33,236)	—	—	33,236	—	—	—
Elimination of losses	—	—	—	—	(26,291)	—	26,291	—
Share options exercised	—	26	—	—	—	—	—	26
Share-based payment	—	—	961	—	—	—	—	961
At January 31, 2015	<u>411</u>	<u>24,101</u>	<u>2,597</u>	<u>(1,943)</u>	<u>19,993</u>	<u>62</u>	<u>(30,255)</u>	<u>14,966</u>

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[Table of Contents](#)**Year ended January 31, 2014**

<b>Group</b>	<b>Share capital £000s</b>	<b>Share premium account £000s</b>	<b>Share-based payment reserve £000s</b>	<b>Merger reserve £000s</b>	<b>Accumulated losses reserve £000s</b>	<b>Total £000s</b>
At February 1, 2013	8,788	33,686	1,410	(1,943)	(39,090)	2,851
Loss for the year from continuing operations	—	—	—	—	(6,093)	(6,093)
Total comprehensive loss for the year	—	—	—	—	(6,093)	(6,093)
New share capital issued	1,287	6,698	—	—	—	7,985
Transaction costs on share capital issued	—	(207)	—	—	—	(207)
Share-based payment	—	—	226	—	—	226
At January 31, 2014	<u>10,075</u>	<u>40,177</u>	<u>1,636</u>	<u>(1,943)</u>	<u>(45,183)</u>	<u>4,762</u>

The accompanying notes form an integral part of these Consolidated Financial Statements.

**Share capital and premium**

When shares are issued, the nominal value of the shares is credited to the share capital reserve. Any premium paid above the nominal value is credited to the share premium reserve. Ordinary Shares of Summit Therapeutics plc have a nominal value of 1 pence per share.

**Share-based payment reserve**

The share-based payment reserve arises as the expense of issuing share-based payments is recognized over time (share option grants). The reserve will fall as share options vest and are exercised, and the impact of the subsequent dilution of earnings crystallises, but the reserve may equally rise or might see any reduction offset, as new potentially dilutive share options are issued.

**Merger reserve**

The merger reserve brought forward relates to the difference between the nominal value of Summit (Oxford) Limited arising from the Group reconstruction in 2004, accounted for using the merger method of accounting under U.K. GAAP, and the amount arising through application of S131 CA85, which is equal to the difference between nominal and fair value of shares issued in business combinations using the acquisition method of accounting.

**Accumulated losses reserve**

The accumulated losses reserve records the accumulated profits and losses, less any subsequent elimination of losses, of the Group since inception of the business. Where businesses or companies are acquired, only the profits or losses arising from the date of acquisition are included.

**Special reserve**

The special reserve was created during the consolidation and subdivision of the Company's share capital as part of a capital reorganisation completed in September 2014. It represents the net balance of the cancellation of the Deferred Shares, the reduction of the share premium account and elimination of current losses from the accumulated deficit.

**Currency translation reserve**

The currency translation reserve records the foreign exchange difference that arises on the translation of the U.S. subsidiary, Summit Therapeutics Inc.

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[Table of Contents](#)

**Notes to the Financial Statements**

**1. Basis of accounting**

The principal accounting policies adopted by Summit Therapeutics plc and its subsidiaries in the preparation of these financial statements are set out below. These policies have been consistently applied to all the years presented, unless otherwise stated.

**Basis of preparation**

The consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ('IFRS') as issued by the International Accounting Standards Board ('IASB') and the Companies Act 2006 applicable to companies reporting under IFRS. The Consolidated Financial Statements have been prepared on a going concern basis and under the historical cost convention. These consolidated financial statements were authorized by the Board of Directors on May 10, 2016.

**Going concern**

These financial statements have been prepared assuming the Group will continue on a going-concern basis. The Group has incurred significant losses and negative cash flows from operations since inception, has an accumulated deficit, and has limited cash resources. Based on management forecasts, the Group's existing cash and cash equivalents will be sufficient to enable the Group to fund the operating expenses and capital expenditure requirements for its major programs up until January 31, 2017, following which the Group needs to raise additional capital to continue to fund its future operations, which may come from a public or private fund raising. There can be no assurance that the Group will be able to generate funds in this manner, on terms acceptable to the Group, on a timely basis or at all. The failure of the Group to obtain sufficient funds on acceptable terms when needed could have a material adverse effect on the Group's business, results of operations and financial condition. The financial statements do not contain any adjustments that might result from the outcome of this uncertainty.

**Use of estimates**

The preparation of the financial statements, in conformity with generally accepted accounting principles, requires the use of estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Although these estimates are based on management's best knowledge of the amount, event or actions, actual results may ultimately differ from those estimates. The areas involving higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the consolidated financial statements are disclosed in Note 2, 'Critical accounting estimates and judgements'.

**Basis of consolidation**

The Consolidated Financial Statements incorporate the financial statements of the Group and entities controlled by the Group made up to the reporting date. Control is achieved where the Company has the power to govern the financial and operating policies of an investee entity so as to obtain benefits from its activities.

The results of subsidiary undertakings acquired or disposed of in the year are included in the Consolidated Statement of Comprehensive Income from the effective date of acquisition or up to the effective date of disposal, as appropriate. Where necessary, adjustments are made to the financial statements of subsidiaries to bring the accounting policies used into line with those used by the Group.

All intra-group transactions, balances, income and expenses are eliminated on consolidation.

**Business Combinations**

The cost of an acquisition is measured as the fair value of the assets exchanged, equity instruments issued and liabilities incurred or assumed at the date of exchange. Identifiable assets acquired together with liabilities and

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## [Table of Contents](#)

contingent liabilities assumed in a business combination are measured initially at their fair values at the acquisition date. The excess of the cost of acquisition over the fair value of the identifiable net assets is recorded as goodwill. Goodwill is not amortised but is reviewed for impairment at least annually and more frequently whenever there is an indication of impairment.

### **Intangible Assets**

In-process research and development that is separately acquired as part of a company acquisition or in-licensing agreement is capitalised even if they have not yet demonstrated technical feasibility, which is usually signified by regulatory approval. The intangible asset relating to intellectual property rights for the utrophin program capitalised as part of the acquisition of MuOx Limited in November 2013 is considered to be not yet available for use. As such, it will not be subject to amortisation and will be tested for impairment at least annually or whenever there is an indicator of impairment. Amortisation will commence when either products underpinned by the intellectual property rights or the rights themselves become available for use.

Other intangible assets, comprising patents are amortised in equal instalments over their useful estimated lives as follows:

All patents (once filed):	Over the period of the relevant patents (assumed to be 20 years)
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### **Impairment of assets**

At each year end date, the Group reviews the carrying amounts of its tangible and intangible assets to determine whether there is any indication that those assets have suffered an impairment loss.

For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash flows (cash-generating units).

An impairment loss is recognized for the amount by which the asset's or cash-generating unit's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of fair value, reflecting market conditions less costs to sell, and value in use based on an internal discounted cash flow evaluation. Impairment losses recognized for cash-generating units is charged *pro rata* to the other assets in the cash generating unit. All tangible and intangible assets are subsequently reassessed for indications that an impairment loss previously recognized may no longer exist. See Note 11 for details.

### **Property, plant and equipment**

Property, plant and equipment are stated at cost less depreciation. Cost comprises the purchase price plus any incidental costs of acquisition and commissioning. Depreciation is calculated to write-off the cost, less residual value, in equal annual instalments over their estimated useful lives as follows:

Leasehold improvements	Over the period of the remaining lease
Laboratory equipment	3-10 years
Office and IT equipment	3-5 years

The residual value, if not insignificant, is reassessed annually.

### **Provisions**

Provisions are recognized when the Group has a present obligation (legal or constructive) as a result of a past event, where it is probable that an outflow of resources will be required to settle the obligation, and where a reliable estimate can be made of the amount of the obligation. If the effect of the time value of money is material, the expected future cash flows will be discounted using a pre-tax discount rate, adjusted for risk where it is inherent in a specific liability.

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## [Table of Contents](#)

### **Other operating income**

Other operating income primarily consists of amounts received from philanthropic, non-government and not-for-profit organisations, and patient advocacy groups, and income received from the Wellcome Trust. Because IFRS does not provide specific accounting guidance for the treatment of amounts received from such organisations, the Group considers that such arrangements are most similar to government grants. Accordingly, these amounts are recognized as other operating income in accordance with International Accounting Standard 20, 'Accounting for Government Grants and Disclosure of Government Assistance,' at the same time as the underlying expenditure is incurred, provided that there is reasonable assurance that the Group will comply with the conditions of such awards. The monies received through these means have historically been held as deferred income in the Consolidated Statement of Financial Position and were released to the Consolidated Statement of Comprehensive Income as the expenditure is incurred. Income received from the Wellcome Trust was in an accrued position at the year end.

Other operating income also includes grant income from the government and government agencies. Grant related income is also recognized as other operating income in accordance with IAS 20, 'Accounting for Government Grants and Disclosure of Government Assistance', at the same time as the underlying expenditure is incurred.

### **Foreign currencies**

Transactions in foreign currencies are recorded at the rate ruling at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies are translated at the rate of exchange ruling at the year end date. All differences are taken to the Consolidated Statement of Comprehensive Income.

Assets and liabilities of subsidiaries that have a functional currency different from the presentation currency (Pound Sterling), are translated at the closing rate at the date of each statement of financial position presented. Income and expenses are translated at average exchange rates. Any resulting differences are recognized in other comprehensive income (loss) in the Consolidated Statement of Comprehensive Income.

### **Employee benefits**

All employee benefit costs, notably holiday pay, bonuses and contributions to Company or personal defined contribution pension schemes are charged to the Consolidated Statement of Comprehensive Income on an accruals basis.

### **Leased assets**

Costs in respect of operating leases are charged to the Consolidated Statement of Comprehensive Income on a straight line basis over the lease term. Assets relating to lease incentives are depreciated over the life of the lease and are included in property, plant and equipment as leasehold improvements.

### **Research and development**

All ongoing research expenditure is currently expensed in the period in which it is incurred. Due to the regulatory environment inherent in the development of the Group's products, the criteria for development costs to be recognized as an asset, as set out in IAS 38 'Intangible Assets', are not met until a product has received regulatory approval and it is probable that future economic benefit will flow to the Group. The Group currently has no qualifying expenditure.

### **Cash and cash equivalents**

Cash and cash equivalents include cash in hand and deposits held on call with the bank.

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## [Table of Contents](#)

### **Share-based payments**

In accordance with IFRS 2 'Share-based Payment', share options are measured at fair value at their grant date. The fair value for the majority of the options is calculated using the Black-Scholes formula and charged to the Consolidated Statement of Comprehensive Income on a straight-line basis over the expected vesting period. For those options issued with vesting conditions other than remaining in employment (for example, those conditional upon the Group achieving certain predetermined financial criteria) either a Monte-Carlo model or a Hull White trinomial lattice model have been used. At each year end date, the Group revises its estimate of the number of options that are expected to become exercisable. This estimate is not revised according to estimates of changes in market-based conditions.

### **Current taxation**

Income tax is recognized or provided at amounts expected to be recovered or paid using the tax rates and tax laws that have been enacted or substantively enacted at the year end date.

Research and development tax credits not received at the year end date are included as current assets within the Consolidated Statement of Financial Position.

Amounts receivable under the Research and Development Expenditure Credit are included within other operating income in the Consolidated Statement of Comprehensive Income with a corresponding asset included as current asset within the Consolidated Statement of Financial Position.

### **Deferred taxation**

Deferred tax assets and liabilities are recognized where the carrying amount of an asset or liability in the Consolidated Statement of Financial Position differs from its tax base, except for differences arising on:

- the initial recognition of goodwill;
- the initial recognition of an asset or liability in a transaction which is not a business combination and at the time of the transaction affects neither accounting or taxable profit; and
- investments in subsidiaries and jointly controlled entities where the Group is able to control the timing of the reversal of the difference and it is probable that the difference will not reverse in the foreseeable future.

Recognition of deferred tax assets is restricted to those instances where it is probable that taxable profit will be available against which the difference can be utilised.

The amount of the asset or liability is determined using tax rates that have been enacted or substantively enacted by the reporting date and are expected to apply when the deferred tax liabilities/(assets) are settled/(recovered).

### **Financial instruments**

The Group holds financial assets and liabilities in the respective categories 'Loans and receivables' and 'Financial liabilities measured at amortised cost'. Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. They arise when the Group provides money, goods or services directly to the debtor with no intention of trading the receivable. They are included in current assets, except for maturities greater than 12 months after the year end date, which are classified as non-current assets. Other liabilities consist of trade and other payables, being balances arising in the course of normal business with suppliers, contractors and other service providers, and borrowings, being loans and hire purchase funds advanced for the refit of leasehold premises and the purchase of laboratory equipment, fixtures and fittings. Loans and receivables, and other liabilities are initially recorded at fair value, and thereafter at amortised cost, if the timing difference is deemed to impact the fair value of the asset or liability.



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## [Table of Contents](#)

The Group assesses at each year end date whether there is objective evidence that a financial asset or a group of financial assets is impaired.

The Group does not hold or trade in derivative financial instruments.

### **Warrants**

Warrants issued by the Group are recognized and classified as equity when upon exercise, the Company would issue a fixed amount of its own equity instruments (Ordinary Shares) in exchange for a fixed amount of cash or another financial asset.

Consideration received, net of incremental costs directly attributable to the issue of such new warrants, is shown in equity. Such warrants are not re-measured at fair value in subsequent reporting periods.

### **2. Critical accounting estimates and judgements**

The preparation of the Consolidated Financial Statements requires the Group to make estimates and judgements that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. The Group bases its estimates and judgements on historical experience and various other assumptions that it considers to be reasonable. Actual results may differ from these estimates under different assumptions or conditions.

#### **Other operating income**

Other operating income primarily consists of amounts received from philanthropic, non-government and not for profit organisations and patient advocacy groups, and the Wellcome Trust. Because IFRS does not provide specific accounting guidance for the treatment of amounts received from such organisations, the Group considers that such arrangements are most similar to government grants. Accordingly, these amounts are recognized as other operating income in accordance with International Accounting Standard 20, 'Accounting for Government Grants and Disclosure of Government Assistance,' at the same time as the underlying expenditure is incurred, provided that there is reasonable assurance that the Group will comply with the conditions of such awards.

Under the terms of the various arrangements with such organisations, should the Group successfully commercialise its products, the Group has agreed to enter into certain revenue sharing agreements, under which those organisations will be entitled to a share of the cumulative net revenue that the Group or its affiliates receive from exploiting the relevant IP or award products. These royalties will be recognized as a reduction in revenue in line with any potential future sales made by the Group. In addition, should certain milestones be achieved, the Group will be obligated to make the milestone payments to certain such organisations. Both potential and future royalty and milestone payment obligations are disclosed as a contingent liability in Note 16, 'Provisions for other liabilities and charges and contingent liabilities'.

#### **Recognition of research expenditure**

The Group recognizes expenditure incurred in carrying out its research and development activities in line with management's best estimation of the stage of completion of each separately contracted study or activity. This includes the calculation of research and development accruals at each period to account for expenditure that has been incurred. This requires estimations of the full costs to complete each study or activity and also estimation of the current stage of completion. In all cases, the full cost of each study or activity is expensed by the time the final report or where applicable, product, has been received.

#### **Share-based payment**

The Group measures share options at fair value at their grant date in accordance with IFRS 2, 'Share-based Payment.' The Group calculates the fair value of the share option using either the Black-Scholes model, or for

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## [Table of Contents](#)

options with performance conditions, a simulation model. The Group charges the fair value to the Consolidated Income Statement over the expected vesting period. In the case of options that are issued below market value, the fair value will be higher than an option granted at market value, and the Group recognizes a larger charge for such options in the Consolidated Income Statement.

### **Business combinations**

On November 22, 2013 the Group acquired 100% of the share capital of MuOx Limited, a University of Oxford spin-off company which holds exclusive rights to early stage utrophin modulators and core biological screening technology. IFRS 3, 'Business Combinations', requires an entity to identify whether a transaction is the acquisition of a business or an asset.

The Group has considered the guidance in IFRS 3 and concluded that the transaction was the acquisition of a business (Note 10).

The MuOx transaction was concluded through a number of agreements with the selling shareholders as detailed in Note 10. Certain of these agreements require additional payments for research services and research outcomes. These payments and potential payments have been assessed using the indicators in IFRS 3 to determine if the payments are additional consideration, employee compensation or research services. All such payments were assessed as either employee compensation or research services and will be expensed in the post-acquisition period as incurred.

The estimation of fair value of assets acquired and liabilities assumed in this business combination is considered to be a significant source of measurement uncertainty.

The rights to intellectual property acquired have been recognized at fair value at the acquisition date (Note 11), estimated using a cash flow model.

### **Impairment**

The Group reviews annually whether there is any indication that Intangible assets have suffered any impairment, in accordance with the accounting policy stated in Note 1, and if there is any indication then further tests are undertaken to determine the potential impact on the carrying value of the assets. The recoverable amounts of cash generating units have been determined based on value-in-use calculations which will be incurred in selling it. These calculations require the use of estimates; the estimates used in impairment testing as at January 31, 2016 and January 31, 2015 are presented in Note 11.

### **3. Changes to accounting policies**

During the year ended January 31, 2016 the following new standards, amendments to standards or interpretations became effective for the first time. The adoption of these interpretations, standards or amendment to standards were either not relevant for the Group or have not led to any significant impact on the Group's financial statements.

International Accounting Standards (IAS/IFRS)	Effective Date
IAS 19 Employee Benefits (amendments)	July 1, 2014

## Table of Contents

At the date of authorization of these consolidated financial statements, the following standards, amendments and interpretations, which have not been applied in these financial statements, were in issue but not yet effective:

<u>International Accounting Standards (IAS/IFRS)</u>	<u>Effective Date</u>
IFRS 9 'Financial instruments'	January 1, 2018
IFRS 9 (Amendment), Financial instruments', regarding general hedge accounting	January 1, 2018
IFRS 11 (Amendment), Joint arrangements on acquisition of an interest in a joint operation	January 1, 2016
IFRS 14, Regulatory deferral accounts	January 1, 2016
IFRS 15, Revenue from contracts with customers	January 1, 2018
IFRS 16, Leases	January 1, 2019
Amendment to IFRS 10 and IAS 28 on investment entities applying the consolidation exception	to be determined
Amendment to IAS 1, 'Presentation of financial statements' on the disclosure initiative	January 1, 2016
Amendments to IAS 16, Property, plant and equipment, and IAS 38, Intangible assets, on depreciation and amortisation	January 1, 2016
Amendments to IAS 16, Property, plant and equipment, and IAS 41, Agriculture, regarding bearer plants	January 1, 2016
IAS 27 (Amendment), Separate financial statements, on the equity method	January 1, 2016
Amendments to IFRS 10, Consolidated financial statements, and IAS 28, Investments in associates and joint ventures	January 1, 2016

Under present circumstances, none of these are expected to have a material impact on the Group's financial statements.

### 4. Segmental reporting

The Summit Group comprises nine legal entities, of which three are trading. These included the eight subsidiary companies and the Group holding company; Summit Therapeutics plc. The Group operates in one reportable segment: Drug Development. The chief operating decision-maker has been identified as the Executive Management Team consisting of the Chief Executive Officer and the Chief Financial Officer. The Executive Management Team reviews the consolidated operating results regularly to make decisions about the financial and organisational resources and to assess overall performance.

The Drug Development segment covers Summit's research and development activities carried out by the Group, primarily comprising the DMD and the CDI programs.

The corporate and other activities of Summit Therapeutics plc, Summit (Oxford) Limited and Summit Therapeutics Inc comprise the costs incurred in providing the facilities, finance, human resource and information technology services which are incurred by the main segment of the Group.

Substantially all of the Group's assets are held in the United Kingdom.

### 5. Directors and employees

The average monthly number of employees of the Group, including Executive Directors, during the year was:

	<u>January 31, 2016</u>	<u>January 31, 2015</u>
Technical, research and development	19	12
Corporate and administration	18	11
	<u>37</u>	<u>23</u>

The Parent Company had no employees in the current or previous financial years.

## Table of Contents

Their aggregate remuneration comprised:

	Year ended January 31, 2016 £000	Year ended January 31, 2015 £000
Wages and salaries	3,876	2,772
Social security costs	247	223
Other pension costs	90	77
Share-based payment	1,160	961
	<u>5,373</u>	<u>4,033</u>

The aggregate amounts of key management compensation are set out below:

	Year ended January 31, 2016 £000	Year ended January 31, 2015 £000
Short term employee benefits	934	758
Post-employment benefits	17	34
Share-based payment	626	603
	<u>1,577</u>	<u>1,395</u>

## 6. Loss before income tax

	Note	Year ended January 31, 2016 £000s	Year ended January 31, 2015 £000s
<b>Other operating income</b>			
Income recognised in respect of the Wellcome Trust		762	1,169
Grant income (1)		645	860
Other income (1)		—	79
Research and development expenditure credit		44	40
		<u>1,451</u>	<u>2,148</u>
<b>Research and development</b>			
Employee benefit expense	5	2,848	1,690
Share-based payment expense	5	356	256
Programme related costs		13,093	7,869
Amortisation of intangible assets	11	10	10
Other research and development costs		549	592
		<u>16,856</u>	<u>10,417</u>
<b>General and administration</b>			
Employee benefit expense	5	1,365	1,382
Share-based payment expense	5	804	705
Foreign exchange gain		(501)	(91)
Depreciation of property, plant and equipment	12	38	23
Operating lease rentals		131	73
Other general and administration costs		2,934	2,350
		<u>4,771</u>	<u>4,442</u>

- (1) Grant income includes amounts received from Innovate UK (formerly the Technology Strategy Board). Included in other income are amounts recognized from the arrangements with philanthropic, non-government and not for profit organisations, and patient advocacy groups, in support of the DMD program. The Group has complied with all the conditions attached to these awards.

## [Table of Contents](#)

### 7. Auditors' remuneration

#### Services provided by the Group's auditors

During the year the Group obtained the following services from the Group's auditors at the cost detailed below:

	Year ended January 31, 2016 £000s	Year ended January 31, 2015 £000s
Fees payable to the Company's auditors and its associates for the audit of the Parent Company and Consolidated Financial Statements:	44	24
Fees payable to the Company's auditors and its associates for other services:		
- Audit of the Company's subsidiaries	71	53
- Audit-related assurance services	6	5
- Other assurance services (1)	158	735
- Tax advisory services	9	13
- Tax compliance services	11	4
<b>Total fees payable</b>	<b>299</b>	<b>834</b>

(1) For the year ended January 31, 2015, other assurance services includes assurance reporting on historical financial information included in the Company's U.S. initial public offering registration statement that was filed with the U.S. Securities and Exchange Commission effective March 5, 2015.

### 8. Income tax

	Year ended January 31, 2016 £000s	Year ended January 31, 2015 £000s
<u>Analysis of credit in period</u>		
United Kingdom corporation tax at 20.17% (2015 - 21.33%)		
Current tax income	2,971	1,257
Prior year adjustment	87	40
Taxation	<u>3,058</u>	<u>1,297</u>
The difference between the total current tax shown above and the amount calculated by applying the standard rate of U.K. corporation tax to the loss before tax is as follows:		
Loss before tax	<u>(20,146)</u>	<u>(12,660)</u>
Loss on ordinary activities multiplied by standard rate of corporation tax in the United Kingdom (Current tax) of 20.17% (2015 - 21.33%)	(4,063)	(2,700)
Non-deductible expenses	184	178
Additional deductions for R&D expenditure	(2,331)	(1,066)
R&D tax credits recoverable at a lower rate 12% (2015: 12%)	1,161	662
Depreciation in excess of capital allowances	(5)	(2)
Taxable losses not recognised	2,081	1,655
Taxable losses at foreign rates	47	16
Other differences	—	6
Share options exercised	(45)	(6)
Prior year adjustments	<u>(87)</u>	<u>(40)</u>
Total taxation credit	<u>(3,058)</u>	<u>(1,297)</u>

There are no current tax liabilities as at January 31, 2016 (2015: Nil).

Tax credits relate to U.K. research and development tax credits claimed under Finance Act 2000.

## [Table of Contents](#)

During the year, the U.K. government substantively enacted a reduction in the main rate of corporation tax from 20% to 19% with effect from April 1, 2017. The main rate of corporation tax will be reduced by a further 1% to 18% with effect from April 1, 2020. The enacted U.K. tax rate until April 1, 2015 was 21%.

Please see Note 17, 'Deferred tax liability' for information on the unrecognized tax losses carried forward.

### 9. Loss per share

The loss per share for continuing operations has been calculated using the loss for the year attributable to the owners of the parent of £17,088,000 (year ended January 31, 2015: loss of £11,363,000) and dividing this by the weighted average number of Ordinary Shares in issue during the year to January 31, 2016: 59,102,292 (year ended January 31, 2015: 39,599,222).

Since the Group has reported a net loss from continuing activities, diluted loss per share is equal to basic loss per share.

Potentially dilutive shares capable of vesting under the share options currently in issue totalled 7,006,306 as at January 31, 2016 (January 31, 2015: 5,250,838).

### 10. Goodwill

	MuOx Limited £000s	Total £000s
<b>Cost</b>		
At February 1, 2015	664	664
<b>At January 31, 2016</b>	<u>664</u>	<u>664</u>
<b>Accumulated amortisation</b>		
At February 1, 2015	—	—
<b>At January 31, 2016</b>	<u>—</u>	<u>—</u>
<b>Net book amount</b>		
At February 1, 2015	664	664
<b>At January 31, 2016</b>	<u>664</u>	<u>664</u>
	MuOx Limited £000s	Total £000s
<b>Cost</b>		
At February 1, 2014	664	664
<b>At January 31, 2015</b>	<u>664</u>	<u>664</u>
<b>Accumulated amortisation</b>		
At February 1, 2014	—	—
<b>At January 31, 2015</b>	<u>—</u>	<u>—</u>
<b>Net book amount</b>		
At February 1, 2014	664	664
<b>At January 31, 2015</b>	<u>664</u>	<u>664</u>

On November 22, 2013, the Group acquired 100% of the share capital of MuOx Limited, a University of Oxford spin-off company which holds exclusive rights to early-stage utrophin modulators and core biological screening technology.

[Table of Contents](#)

Goodwill represents the difference between the fair value of the identifiable assets acquired and liabilities assumed for MuOx Limited and the amount paid in consideration. Goodwill is attributable to synergies expected from the Group's collaboration with the University of Oxford and other founders of MuOx Limited.

In accordance with IAS 36 'Goodwill' has been reviewed for impairment and no provision is considered necessary. The impairment review is included as part of the intangible assets impairment review in Note 11 'Intangible assets' as they form part of the same cash-generating unit.

**11. Intangible assets**

	Iminosugar related programmes acquired £000s	Utrophin programme acquired £000s	Other patents and licences £000s	Total £000s
<b>Cost</b>				
At February 1, 2015	1,380	3,321	197	4,898
<b>At January 31, 2016</b>	<u>1,380</u>	<u>3,321</u>	<u>197</u>	<u>4,898</u>
<b>Accumulated amortisation</b>				
At February 1, 2015	(1,380)	—	(35)	(1,415)
Provided in the year	—	—	(10)	(10)
<b>At January 31, 2016</b>	<u>(1,380)</u>	<u>—</u>	<u>(45)</u>	<u>(1,425)</u>
<b>Net book amount</b>				
At February 1, 2015	—	3,321	162	3,483
<b>At January 31, 2016</b>	<u>—</u>	<u>3,321</u>	<u>152</u>	<u>3,473</u>

	Iminosugar related programmes acquired £000s	Utrophin programme acquired £000s	Other patents and licences £000s	Total £000s
<b>Cost</b>				
At February 1, 2014	1,380	3,321	197	4,898
<b>At January 31, 2015</b>	<u>1,380</u>	<u>3,321</u>	<u>197</u>	<u>4,898</u>
<b>Accumulated amortisation</b>				
At February 1, 2014	(1,380)	—	(25)	(1,405)
Provided in the year	—	—	(10)	(10)
<b>At January 31, 2015</b>	<u>(1,380)</u>	<u>—</u>	<u>(35)</u>	<u>(1,415)</u>
<b>Net book amount</b>				
At February 1, 2014	—	3,321	172	3,493
<b>At January 31, 2015</b>	<u>—</u>	<u>3,321</u>	<u>162</u>	<u>3,483</u>

Amortisation of intangible assets is included in the line 'Research and development' shown on the face of the Consolidated Statement of Comprehensive Income.

In accordance with IAS 38, 'Intangible assets' have been reviewed for impairment.

On 22 November 2013 the Group recognized £3,321,000 of intangible assets related to the utrophin program and £664,000 of goodwill upon acquisition of MuOx Limited (Note 10).

## Table of Contents

The key assumptions used in the valuation model to determine its value in use are as follows:

- Expected research and development costs based on management's past experience and knowledge
- Probabilities of achieving development milestones based on industry standards
- Reported disease prevalence
- Expected market share based on management's estimates
- Drug reimbursement, costs of goods and marketing estimates
- Expected patent life

The valuation model covers a period significantly longer than five years which is based on expected patent life, once filed, due to the length of the development cycle for assets of this nature. A discount factor of 18% has been used over the forecast period, which is considered appropriate for the purpose of impairment reviews as it reflects the current market assessment of the time value of money and the risks specific to the cash-generating unit.

Based on sensitivity analysis, no reasonably possible change in assumptions would cause the carrying value of this asset to exceed its recoverable amount.

## 12. Property, plant and equipment

	Leasehold improvements	Laboratory equipment	Office and IT equipment	Total
<b>Cost</b>	<b>£000s</b>	<b>£000s</b>	<b>£000s</b>	<b>£000s</b>
At February 1, 2015	9	137	162	308
Additions	—	—	66	66
At January 31, 2016	9	137	228	374
<b>Accumulated depreciation</b>				
At February 1, 2015	(4)	(135)	(114)	(253)
Charge for the year	(3)	—	(35)	(38)
At January 31, 2016	(7)	(135)	(149)	(291)
<b>Net book value</b>				
At February 1, 2015	5	2	48	55
At January 31, 2016	2	2	79	83

	Leasehold improvements	Laboratory equipment	Office and IT equipment	Total
<b>Cost</b>	<b>£000s</b>	<b>£000s</b>	<b>£000s</b>	<b>£000s</b>
At February 1, 2014	9	137	127	273
Additions	—	—	35	35
At January 31, 2015	9	137	162	308
<b>Accumulated depreciation</b>				
At February 1, 2014	(1)	(135)	(94)	(230)
Charge for the year	(3)	—	(20)	(23)
At January 31, 2015	(4)	(135)	(114)	(253)
<b>Net book value</b>				
At February 1, 2014	8	2	33	43
At January 31, 2015	5	2	48	55



[Table of Contents](#)

### 13. Prepayments and other receivables

	Year ended January 31, 2016 £000s	Year ended January 31, 2015 £000s
Other receivables	312	215
Prepayments and accrued income	1,226	2,415
	<u>1,538</u>	<u>2,630</u>

Included in prepayments as at January 31, 2015 was £1,240,000 of costs relating to the U.S. initial public offering ('U.S. IPO') of American Depositary Shares and listing on the NASDAQ Global Market that was completed in March 2015. These costs were subsequently offset against share premium in the year ended January 31, 2016.

### 14. Trade and other payables

	Year ended January 31, 2016 £000s	Year ended January 31, 2015 £000s
Trade payables	716	1,195
Other taxes and social security costs	79	61
Accruals and deferred income	2,310	2,445
Other creditors	101	20
	<u>3,206</u>	<u>3,721</u>

### 15. Financial instruments

	Note	Year ended January 31, 2016 £000s	Year ended January 31, 2015 £000s
<b>Loans and receivables</b>			
Other receivables (1)	13	312	215
Cash and cash equivalents		<u>16,304</u>	<u>11,265</u>
		<u>16,616</u>	<u>11,480</u>
<b>Financial liabilities measured at amortised cost</b>			
Trade and other payables	14	<u>3,206</u>	<u>3,721</u>

(1) Prepayments have been excluded as they are not considered to be a financial instrument. The comparative for the year ended January, 31 2015 has been revised to exclude prepayments.

The Group's activities expose it to a variety of financial risks: foreign currency risk; interest rate risk; credit risk; and liquidity risk.

The Group's principal financial instrument comprises cash, and this is used to finance the Group's operations. The Group has various other financial instruments such as trade receivables and payables that arise directly from its operations. The category of loans and receivables contains only prepayments and other receivables, shown on the face of the Consolidated Statement of Financial Position, all of which mature within one year.

The Group has compared fair value to book value for each class of financial asset and liability: no difference was identified. The Group has a policy, which has been consistently followed, of not trading in financial instruments.

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## [Table of Contents](#)

### Foreign currency risk

Foreign currency risk refers to the risk that the value of a financial commitment or recognized asset or liability will fluctuate due to changes in foreign currency rates. The Group's net income and financial position, as expressed in Pounds Sterling, are exposed to movements in foreign exchange rates against the U.S. Dollar and the Euro. The main trading currencies of the Group are Pounds Sterling, the U.S. Dollar, and the Euro. The Group is exposed to foreign currency risk as a result of trading transactions, capital raises in the U.S. and the translation of foreign bank accounts.

The exposure to foreign exchange is monitored by the Group's finance function. Exposures are generally managed through natural hedging *via* the currency denomination of cash balances and any impact currently is not material to the Group.

	Year ended January 31, 2016 £000	Year ended January 31, 2015 £000
Cash at bank and in hand		
Pounds Sterling	12,430	9,192
U.S. Dollar	3,874	2,073
	<u>16,304</u>	<u>11,265</u>

### Interest rate risk

One of the risks arising from the Group's financial instruments is interest rate risk. The Group holds no derivative instruments to manage interest rate risk; instead the Group placed deposits surplus to short-term working capital requirements with a variety of reputable U.K. and U.S.-based banks and building societies. These balances are placed at fixed rates of deposit with maturities between one month and three months.

The Group's cash and short-term deposits were as follows:

	Year ended January 31, 2016 £000s	Year ended January 31, 2015 £000s
On current account	<u>16,304</u>	<u>11,265</u>
	<u>16,304</u>	<u>11,265</u>

The interest rates for dated deposits were dependent on the rates offered by the Group's borrowers. The interest rate for short-term deposits is variable dependent on the rates offered by the Group's bankers. During the year to January, 31 2016, the banking facilities returned an average rate after fees of 0.22% (2015: 0.77%).

The Group's exposure to interest rate risk is illustrated with regard to the opening and closing cash balances and the difference that an increase or decrease of 1% in interest rates would have made based on the average cash balance of £13,785,000 (2015: £6,648,000) in the year:

Year ended January 31, 2016	-1%	Actual	+1%
Interest rate	—	0.22	1.22
Interest received (£000s)	—	30	168
Year ended January 31, 2015	-1%	Actual	+1%
Interest rate	—	0.77	1.77
Interest received (£000s)	—	51	118

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[Table of Contents](#)

**Credit risk**

The credit risk with respect to customers is limited and the Group had no trade receivables outstanding at January 31, 2016.

Financial instruments that potentially expose the Group to concentrations of credit risk consist primarily of short-term cash investments and trade accounts receivable. Excess cash is invested in short-term money market instruments, including bank term deposits, money market and liquidity funds and other debt securities provided by a variety of financial institutions with strong credit ratings; these investments typically bore minimal credit risk in the year.

Cash balances maintained during the year have been principally held with major U.K. and U.S. banking institutions. We do not believe that this constituted a major credit risk.

**Liquidity risk**

Prudent liquidity risk management implies maintaining sufficient cash and the availability of funding through an adequate amount of committed credit facilities.

The Group ordinarily finances its activities through cash generated from operating activities and private and public offerings of equity securities. The Group anticipates that its operating cash flow together with available cash, cash equivalents and short-term investments will be sufficient to meet its anticipated needs. See Note 1 'Going concern'.

All of the financial liability categories at each balance sheet date have maturity dates of less than twelve months from the balance sheet date. Provisions are amounts contingent upon events taking place and the recognition of deferred taxation is dependent upon future profits arising.

**Capital management**

The primary aim of the Group's capital management, defined as its share capital, is to safeguard the Group's ability to continue as a going concern, to support its programs and maximise shareholder value.

The Group monitors its capital structure and makes adjustments, as and when it is deemed necessary and appropriate to do so, using such methods as the issuing of new shares. The capital structure of the Group has come entirely from equity issues.

**16. Provisions for other liabilities and charges and contingent liabilities**

<u>Dilapidations</u>	Year ended January 31, 2016 <u>£000</u>	Year ended January 31, 2015 <u>£000</u>
At February 1, 2015	45	17
Additions	28	28
At January 31, 2016	73	45

Management have made a provision in respect of the dilapidation costs associated with the reinstatement obligations on their current lease based on best estimates. It is management's intention to utilise the provision at the end of the lease term.

In addition to those items provided for above, the Group also has the following contingencies:

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## [Table of Contents](#)

### **MuOx Limited**

Under the option agreement that the Group and Isis Innovation Limited ('Isis') entered into in November 2013, and as amended in November 2015, Isis granted to the Group an exclusive option to license the IP arising from the research carried out under the sponsored research agreement within specified periods. If the Group exercises its option to obtain a license under arising IP, the Group would be obliged to pay Isis up to a specified sum in option exercise fees.

For any IP arising from the research carried out under the sponsored research agreement and for which the Group has exercised the option and that comprises new chemical entities or compounds, the Group would obtain an exclusive, sub licensable license. The Group is obligated to pay milestone payments of up to £75,000 upon the achievement of specified development milestones, whether such milestones occur prior to or after the Group's exercise of the option to obtain an exclusive sub licensable license. Following exercise of such an option the Group would also be obligated to pay milestone payments upon the achievement of specified regulatory milestones with respect to each optioned compound. The specified regulatory milestone payment is due each time the specified regulatory milestone is achieved with respect to an optioned compound and, if each optioned compound achieved each regulatory milestone, we would be obligated to pay Isis a total of £3.7 million in regulatory milestone payments for each optioned compound.

The Group would also be obligated to pay Isis a low single digit royalty of net sales by the Group, its affiliates or sub licensees of any product containing an optioned compound.

### **Wellcome Trust**

Under the terms of the revenue sharing agreement the Group would enter into with the Wellcome Trust to permit its exploitation of the exploitation IP or awards products, the Wellcome Trust is entitled to a share of the cumulative net revenue that the Group or its affiliates receive from exploiting the exploitation IP or award products. The Wellcome Trust would be eligible to receive a tiered portion of the net revenue, ranging from a mid-single digit up to a mid-twenties percentage. In addition, the Group would be obligated to pay the Wellcome Trust a milestone of a specified amount if cumulative net turnover exceeds a specified amount.

### **University College London (novated from The School of Pharmacy, University of London)**

The Group has agreed to pay University College London (agreement novated from The School of Pharmacy, University of London), a low single-digit share of all revenue, pre and post commercialisation, received by the Group in respect of ridinilazole up to a maximum of £1 million.

### **U.S. Not for Profit Organisations**

#### *Muscular Dystrophy Association*

The Group has agreed to pay the Muscular Dystrophy Association ('MDA') a specified lump sum amount, less the previously paid MDA cash infusion milestone payment, following the regulatory approval of any project product for use in the United States or European Union in the treatment of DMD and an additional specified sum upon achievement of a commercial milestone. The group would be obligated to pay MDA a low single digit percentage royalty of worldwide net sales by the Group, its affiliates or licensees of any project product.

#### *Duchenne Partners Fund Inc.*

The Group has agreed to pay Duchenne Partners Fund Inc., ('DPF') a specified lump sum amount, less the previously paid DPF cash infusion milestone payment, following the regulatory approval of any project product for use in the United States or European Union in the treatment of DMD and an additional specified sum upon achievement of a commercial milestone. The group would be obligated to pay DPF a low single digit percentage royalty of worldwide net sales by the Group, its affiliates or licensees of any project product.

## [Table of Contents](#)

The total amount payable with respect to regulatory milestones under the U.S. not for profit organisation agreements would be \$2.5 million if the Group meets all regulatory milestones. The total amount payable with respect to royalties is not known due to the contingent nature of the payments.

Management has considered the current stage of the Group's drug development programs and believe that the milestones and payments detailed above are contingent liabilities in line with the Group's accounting policy.

### 17. Deferred tax liability

There is a deferred tax liability of £664,270 that was recognized upon acquisition of MuOx Limited which took place in the year ended January 31, 2014. There were no movements in the deferred tax liability during the year.

	Year ended January 31, 2016 £000	Year ended January 31, 2015 £000
Amounts falling due more than one year	664	664
	<u>664</u>	<u>664</u>

There is an unrecognized deferred tax asset in relation to the trading losses carried forward of £10,047,000 (2015: £8,063,000), £14,000 in relation to provisions (2015: £9,000) and £205,000 (2015: £230,000) in relation to future exercisable shares. There is an unprovided deferred tax liability of £14,000 (2015: £11,000) in respect of accelerated capital allowances.

The unrecognized deferred tax asset would be recovered against future company taxable profits. In the opinion of the Directors, there is insufficient evidence that the asset will be recovered, as such the deferred tax asset has not been recognized in the financial statements.

### 18. Share capital

	Year ended January 31, 2016 £000	Year ended January 31, 2015 £000
<b>Allotted, called up and fully paid</b>		
61,290,740 (2015: 41,117,697) Ordinary shares of 1p each	613	411
	<u>613</u>	<u>411</u>

On March 5, 2015 the Group completed a U.S. IPO on the NASDAQ Global Market issuing 3,450,000 American Depositary Shares ('ADS') at a price of \$9.90 per ADS. On March 18, 2015 the underwriters exercised in full their over-allotment option to purchase an additional 517,500 ADSs on the same terms. Each ADS represents five Ordinary Shares of 1 pence each in the capital of the Company, thus 19,837,500 Ordinary Shares were issued. Total gross proceeds of \$39.3 million (£26.1 million) were raised.

Following the U.S. IPO and exercise of the over-allotment option, the number of Ordinary Shares in issue was 60,955,197.

During the year the following exercise of share options took place;

Date	Number of options exercised
March 23, 2015	27,384
May 12, 2015	19,163
June 16, 2015	127,315
June 19, 2015	102,422
July 1, 2015	53,559
July 29, 2015	5,700

## [Table of Contents](#)

The total net proceeds from exercised share options during the year was £0.22 million.

Following the exercise of the above share options, the number of Ordinary Shares in issue was 61,290,740.

Post the year end, on April 14, 2016, the number of Ordinary Shares increased to 61,467,785 following the exercise of warrants over 177,045 Ordinary Shares at an exercise price of 60 pence per share. The warrants were issued to Nplus1 Singer Capital Markets Limited as part of an equity placing in 2012. Following the exercise there are no further outstanding warrants held by Nplus1 Singer Capital Markets. The issue of new shares raised net proceeds of £106,227.

All new Ordinary Shares issued rank *pari passu* with existing Ordinary Shares.

### 19. Share option scheme

At January 31, 2016 the outstanding share options, which include the share options granted to Directors, are shown below:

Date of grant	Exercise price (£)	Number of shares	Date from which exercisable	Expiry date
<b>Approved EMI scheme</b>				
October 13, 2006	2.72	1,200	October 13, 2007	October 13, 2016
November 21, 2007	2.28	4,800	November 21, 2008	November 21, 2017
April 7, 2011	0.65	14,403	April 8, 2014	April 7, 2021
May 10, 2012	0.60	84,250	May 10, 2013	May 10, 2022
May 10, 2012	0.60	150,046	May 10, 2014	May 10, 2022
December 24, 2012	0.85	318,334	December, 24 2014	December 24 2022
January 31, 2013	0.20	72,973	July 31, 2013	January 31, 2023
December 18, 2013	1.85	370,500	*	December 18, 2023
July 15, 2014	1.26	347,121	July 15, 2016	July 15, 2024
January 21, 2015	1.23	8,333	January 21, 2017	January 21, 2025
January 21, 2015	1.23	16,667	January 21, 2018	January 21, 2025
		1,388,627		
<b>Unapproved scheme</b>				
October 13, 2006	2.72	52,500	October 13, 2007	October 13, 2016
November 21, 2007	2.28	19,167	November 21, 2008	November 21, 2017
April 7, 2011	0.65	13,981	April 8, 2014	April 7, 2021
May 10, 2012	0.60	657,500	May 10, 2013	May 10, 2022
December 18, 2013	1.85	492,500	*	December 18, 2023
December 18, 2013	0.20	76,364	June 18, 2013	December 18, 2023
June 23, 2014	0.20	33,334	June 23, 2015	June 23, 2024
June 23, 2014	1.47	525,000	*	June 23, 2024
July 15, 2014	1.26	975,000	July 15, 2016	July 15, 2024
July 15, 2014	0.80	100,000	May 30, 2015	May 30, 2023
December 23, 2014	1.37	25,000	December 23, 2016	December 23, 2024
January 21, 2015	1.23	75,000	January 21, 2017	January 21, 2025
June 16, 2015	1.43	2,402,333	June 16, 2017	June 16, 2025
September 4, 2015	1.49	120,000	September 4, 2017	September 4, 2025
October 15, 2015	1.31	50,000	October 15, 2017	October 15, 2025
		5,617,679		
		7,006,306		

\* Subject to the achievement of performance conditions, their options will vest and become exercisable on completion of Phase 2 proof of concept clinical trials in both the DMD and CDI programs or the third anniversary of grant, whichever is sooner.

## Table of Contents

The Group has no legal or constructive obligation to repurchase or settle the options in cash.

The movement in the number of share options is set out below:

	Weighted average exercise price	Year ended January 31, 2016	Weighted average exercise price	Year ended January 31, 2015
Outstanding at 1 February	£ 1.18	5,250,838	£ 1.27	3,573,597
Granted during the year	1.43	2,592,333	1.27	2,258,341
Lapsed/surrendered during the year	1.31	(501,322)	2.27	(524,815)
Exercised during the year	0.66	(335,543)	0.47	(56,285)
Number of outstanding options at 31 January	£ 1.29	<u>7,006,306</u>	£ 1.18	<u>5,250,838</u>

As at January 31, 2016, 1,987,296 share options were capable of being exercised with a weighted average exercise price per option of £0.98 (2015: 1,426,521 with a weighted average exercise price per option of £0.72). The options outstanding at January, 31 2016 had a weighted average exercise price per option of £1.29 (2015: £1.18), and a weighted average remaining contractual life of 8.2 years (2015: 8.5 years).

The fair value per award granted and the assumptions used in the calculations are as follows:

Date of grant	Type of award	Number of shares	Exercise price (£)	Share price at grant date (£)	Fair value per option (£)	Award life (years)	Risk free rate
October 13, 2006	EMI	1,200	2.72	2.72	0.72	3.0	4.60%
October 13, 2006	Unapproved	52,500	2.72	2.72	0.72	3.0	4.60%
November 21, 2007	EMI	4,800	2.28	2.28	0.84	3.0	4.60%
November 21, 2007	Unapproved	19,167	2.28	2.28	0.84	3.0	4.60%
April 7, 2011	EMI	14,403	0.65	0.65	0.47	5.0	2.70%
April 7, 2011	Unapproved	13,981	0.65	0.65	0.47	5.0	2.70%
May 10, 2012	EMI	84,250	0.60	0.52	0.22	5.0	1.00%
May 10, 2012	EMI	150,046	0.60	0.52	0.24	5.0	1.00%
May 10, 2012	Unapproved	657,500	0.60	0.52	0.20	5.0	1.00%
December 24, 2012	EMI	318,334	0.85	0.85	0.59	5.0	0.90%
January 31, 2013	EMI	72,973	0.20	0.94	0.74	5.0	1.00%
December 18, 2013	EMI	370,500	1.85	1.85	0.37	5.0	0.90%
December 18, 2013	Unapproved	492,500	1.85	1.85	0.37	5.0	0.90%
December 18, 2013	Unapproved	76,364	0.20	1.85	1.65	5.0	1.00%
June 23, 2014	Unapproved	33,334	0.20	1.50	0.92	3.0	1.30%
June 23, 2014	Unapproved	525,000	1.47	1.50	0.92	3.8	1.30%
July 15, 2014	EMI	347,121	1.26	1.26	0.65	3.0	1.30%
July 15, 2014	Unapproved	975,000	1.26	1.26	0.65	3.0	1.30%
July 15, 2014	Unapproved	100,000	0.80	0.81	0.65	1.9	0.50%
December 23, 2014	Unapproved	25,000	1.37	1.37	0.70	3.0	0.80%
January 21, 2015	EMI	25,000	1.23	1.22	0.64	3.0	0.60%
January 21, 2015	Unapproved	75,000	1.23	1.22	0.64	3.0	0.60%
June 16, 2015	Unapproved	2,402,333	1.43	1.44	0.65	3.0	0.91%
September 4, 2015	Unapproved	120,000	1.49	1.48	0.68	3.0	0.88%
October 15, 2015	Unapproved	50,000	1.31	1.36	0.57	3.0	0.70%
		<u>7,006,306</u>					

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## [Table of Contents](#)

The key assumptions used in calculating the share-based payments are as follows:

- a. Black-Scholes valuation methodology was used for all options prior to 2008.
- b. The majority of share option awards made since 2011 are performance related and have been modelled using the Monte-Carlo methodology. The options granted on January 31, 2013 and December 18, 2013, each at an exercise price of 20 pence, and 33,334 of the unapproved options granted on June 23, 2014 are not performance related.
- c. Figures in the range of 18-134% have been used for expected volatility. This has been derived from historic share price performance, weighted to exclude periods of unusually high volatility.
- d. Expected dividend yield is nil, consistent with the Directors' view that the Group's business model is to generate value through capital growth rather than the payment of dividends.
- e. The risk free rate is equal to the prevailing U.K. Gilts rate at grant date that most closely matches the expected term of the grant.
- f. Share options are assumed to be exercised immediately on vesting.
- g. The fair value of the options awarded on May 10, 2012 is the average of the fair values calculated per possible vesting instalment.

### **20. Fixed assets purchase commitments**

At January 31, 2016 the Group had no capital commitments (January 31, 2015: nil).

### **21. Leasing and other commitments**

The Group's total commitments under non-cancellable operating leases are as follows:

	Land & Buildings	
	Year ended January 31, 2016 £000s	Year ended January 31, 2015 £000s
Leases which expire		
Not later than one year	97	88
Later than one year and not later than five years	194	277
	<u>291</u>	<u>365</u>

In addition, the Group enter into contracts in the normal course of business with CROs to assist in the performance of research and development activities and other services and products for operating purposes. These contracts generally provide for termination on notice, and therefore are cancellable contracts and not reflected in the table above.

### **22. Related party transactions**

During the year £18,332 was paid to Dr Frank M Armstrong Consulting Limited, a company controlled by Dr Frank Armstrong in respect of his fees as Non-Executive Director and Chairman (2015: £27,963). Of this amount £nil was outstanding at the year end (2015: £nil).

Dr Frank Armstrong is a member of the Board of Directors of Juniper Pharmaceuticals Inc. During the year £21,551 (2015: £nil) was paid to Juniper Pharma Services Limited, a wholly owned subsidiary of Juniper Pharmaceuticals Inc. in respect of clinical manufacturing services. Of this amount £nil was outstanding at the year end (2015: £nil).

See Note 5 for details of key management emoluments.



**23. Subsequent Events**

On April 14, 2016 the number of Ordinary Shares increased to 61,467,785 following the exercise of warrants over 177,045 Ordinary Shares at an exercise price of 60 pence per share. The warrants were issued to Nplus1 Singer Capital Markets Limited as part of an equity placing in 2012. Following the exercise there are no further outstanding warrants held by Nplus1 Singer Capital Markets. The issue of new shares raised net proceeds of £106,227.



**DATED**

**16TH NOVEMBER 2015**

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(1) SUMMIT THERAPEUTICS PLC

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**DEED OF VARIATION**

**IN RELATION TO A WARRANT INSTRUMENT MADE ON  
22 NOVEMBER 2013**

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**Fasken Martineau LLP**  
17 Hanover Square London W1S 1HU  
Telephone: +44 20 7917 8500 Fax: +44 20 7917 8555

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**THIS DEED** is made on 16<sup>th</sup> November 2015

**BY**

**SUMMIT THERAPEUTICS PLC**, a company registered in England and Wales (company number 05197494), whose registered office is at 85B Park Drive, Milton Park, Abingdon, Oxon, OX14 4RY (the “**Company**”); and

**RECITALS:**

- (A) Pursuant to an option agreement dated 22 November 2013 between Isis Innovation Limited (“**Isis**”) (1) the Company (2) and the Chancellor Masters and Scholars of the University of Oxford (3) (the “**Option Agreement**”), the Company undertook to execute a warrant instrument and issue warrants to Isis (the “**Original Warrant Instrument**”).
- (B) The Company executed the Original Warrant Instrument in order to create certain warrants and to define the rights and interests of the registered holders of such warrants and to afford protection for such rights and interests.
- (C) Pursuant to a restructuring of the Company on 3 July 2014, the ordinary shares to which the Warrants relate were consolidated and subdivided to the effect that every twenty ordinary shares of 1p each were consolidated into one ordinary share of 20p each and then further subdivided to create one ordinary share of 1p and 19 deferred shares of 1p each. It is noted that the deferred shares were subsequently cancelled on 3 September 2014.
- (D) On 19 February 2015 the shareholders of the Company passed a resolution to change the name of the Company from Summit Corporation Plc to Summit Therapeutics Plc.
- (E) The Company, Isis and the Chancellor Masters and Scholars of the University of Oxford wish to continue working together pursuant to the terms of the Option Agreement and subject to a variation of the Original Warrant Instrument.
- (F) Accordingly, the Company hereby varies the Original Warrant Instrument by virtue of this Deed.

**IT IS AGREED:**

**1 INTERPRETATION**

In this Deed:

- 1.1 words and expressions defined in the Original Warrant Instrument shall, unless the context otherwise requires, have the same meanings in this Deed;
- 1.2 a reference to a clause, unless the context otherwise requires, is a reference to a clause of this Deed;
- 1.3 headings are for convenience only and do not affect the interpretation of this Deed.

---

**2 VARIATION**

- 2.1 With effect from the date of this Deed, the Original Warrant Instrument shall be varied as follows:
- 2.1.1 the cover of the Original Warrant Instrument shall be amended by the deletion of the reference to “7,081,770 New Ordinary Shares of 1p each” and the substitution thereof for the words “354,090 New Ordinary Shares of 1p each”
  - 2.1.2 the following definitions shall be inserted in substitution for, and to the exclusion of, the definitions of “A Warrants”, “B Warrants” and “C Warrants” in the Original Warrant Instrument:
    - (a) “**A Warrants**” means the 50,000 Warrants the exercise of which is subject to the satisfaction of the A Warrant Condition”;
    - (b) “**B Warrants**” means the 127,045 Warrants the exercise of which is subject to the satisfaction of the B Warrant Condition”;
    - (c) “**C Warrants**” means the 177,045 Warrants the exercise of which is subject to the C Warrant Condition”.
  - 2.1.3 The following definition shall be inserted into Clause 1.1 immediately after the definition of “Directors” in the Original Warrant Instrument:  
“**Effective Date**”: 22 November 2013”
  - 2.1.4 the following clause 4 shall be inserted in substitution for, and to the exclusion of, the existing clause 4 in the Original Warrant Instrument;  
“Subject to clause 6, the Subscription Price for each Ordinary Share to which a Warrant relates shall be 20p”.
  - 2.1.5 the reference in Schedule 1 of the Original Warrant Instrument to the Subscription Price of each Ordinary Share shall be changed from 1p per Ordinary Share to 20p per Ordinary Share.
  - 2.1.6 the Conditions of Exercise and Subscription Periods detailed in Schedule 4 of the Original Warrant Instrument shall be amended as follows:
    - (a) the following clause 3 shall be inserted in substitution for, and to the exclusion of, the existing clause 3:
      - 3.1 “The B Warrants shall be exercisable if and only if the Company or Company’s sub-licensee initiates GLP Toxicology Studies for which the First Compound by 22 November 2017 (the “**B Warrant Condition**”) failing which the B Warrants will lapse on such date.”
      - 3.2 “The Subscription Period for the B Warrants shall commence on the fourth anniversary of the Effective Date and shall end at 5pm on the date which is three calendar months after such fourth anniversary”

---

(b) the following clause 4 shall be inserted in substitution for, and to the exclusion of, the existing clause 4:

- 4.1 *“The C Warrants shall be exercisable if and only if both (a) the B Warrant Condition has been duly satisfied and (b) the first dosing to a human subject of a product licensed pursuant to the Option Agreement in a Phase 1 Clinical Trial occurs prior to 22 November 2019 (the “C Warrant Condition”) failing which the C Warrants will lapse on such date **PROVIDED ALWAYS** that if such an event occurs after that date but prior to 22 May 2021 and the delay is not caused by any act or omission of the University (whether under the Option Agreement or the Sponsored Research Agreement) then the said date by which such first dosing must occur shall be deferred by the extent of such delay (such date being referred to herein as “the Deferred C Condition Date”)”*
- 4.2 *“The Subscription Period for the C Warrants shall commence on the sixth anniversary of the Effective Date and shall end at 5pm on the date which is three calendar months after such sixth anniversary **SAVE THAT** if the proviso to paragraph 4.1 applies, the Subscription Period shall commence on the Deferred C Condition Date and shall end at 5pm on the date which is three calendar months after the Deferred C Condition Date.”*

2.2 Save as provided in clause 2.1, the Original Warrant Instrument shall continue in full force and effect.

### 3 GENERAL

- 3.1 This Deed may be executed in any number of counterparts each of which when executed and delivered shall constitute an original and all the counterparts together constitute one and the same instrument.
- 3.2 This Deed constitutes the entire agreement between the parties relating to the variation of the Original Warrant Instrument as set out above. No variation of this Deed shall be valid unless it is made in accordance with the provisions of clause 11 of the Original Warrant Instrument.
- 3.3 This Deed shall be governed by and construed under English law and each of the parties hereto agrees to submit to the exclusive jurisdiction of the English courts as regards any claim or matter arising hereunder.

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IN WITNESS whereof the Company has executed this Deed as a deed and it is hereby delivered on the day and year first before written.

**EXECUTED AND DELIVERED AS A DEED BY SUMMIT** )  
**THERAPEUTICS PLC** acting by Glyn Edwards, a director, in the presence of: )  
 )

---

/s/ Glyn Edwards  
Director

---

/s/ Melissa Strange  
*Witness signature*

---

Melissa Strange  
*Witness name*

---

Geroan, West Edge, Marsh  
Gibbon, OX27 ONA  
*Witness address*

---

FCCA, Accountant  
*Witness occupation*

Confidential Materials omitted and filed separately with the Securities and Exchange Commission. Double asterisks denote omissions.

**DATED 16th November 2015**

**(1) THE CHANCELLOR MASTERS AND SCHOLARS OF THE UNIVERSITY OF OXFORD**

**- and -**

**(2) SUMMIT THERAPEUTICS PLC**

**- and -**

**(3) ISIS INNOVATION LIMITED**

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**VARIATION AGREEMENT**

**relating to the Option Agreement in relation to the intellectual property rights arising in the performance of the Sponsored Research Agreement and Research Field dated 22 November 2013**

---

**THIS AGREEMENT** (the “**Variation Agreement**”) is dated 16th November 2015 (the “**Variation Date**”)

**BETWEEN:-**

- (1) **THE CHANCELLOR MASTERS AND SCHOLARS OF THE UNIVERSITY OF OXFORD**, whose administrative office is at University Offices, Wellington Square, Oxford, OX1 2JD (the “**University**”); and
- (2) **SUMMIT THERAPEUTICS PLC**, a public limited company incorporated in England and Wales with company number 05197494 whose address is 85b Park Drive, Milton Park, Abingdon, Oxfordshire, OX14 4RY (the “**Summit**”); and
- (3) **ISIS INNOVATION LIMITED**, a private limited company incorporated in England and Wales with company number 02199542, whose registered office is at University Offices, Wellington Square, Oxford, OX1 2JD (“**Isis**”),

each a “**Party**” and together the “**Parties**”.

**RECITALS**

- (A) The Parties entered into an option agreement in which Isis granted an option to Summit in relation to the intellectual property rights arising in the performance of the Sponsored Research Agreement and Research Field dated 22 November 2013 (the “**Option Agreement**”).
- (B) On 19 February 2015, the Shareholders of Summit passed a resolution to change the name of Summit from Summit Corporation plc to Summit Therapeutics plc.
- (C) The Parties now wish to amend the Option Agreement as set out in this Variation Agreement.

**NOW IT IS AGREED AS FOLLOWS:**

**1. DEFINITIONS AND INTERPRETATIONS**

- 1.1 The terms defined in the Option Agreement shall have the same meanings when used in this Variation Agreement unless specifically indicated otherwise.
- 1.2 A reference to this Variation Agreement shall include any Schedules.
- 1.3 The words “**include**”, “**including**”, or “**in particular**” are deemed to have the words “without limitation” following them.

**2. VARIATION**

- 2.1 In consideration of Isis agreeing to the extension of the term of the Option Agreement, as a result of the amendment to the Sponsored Research Agreement (as defined below) and the variation set out in clause 2.2.1 of this Variation Agreement, Summit shall pay to Isis the sum of £[\*\*] pounds) within [\*\*] days of receipt by Summit of an invoice from Isis for such sum, said invoice to be issued on or after the Variation Date.



---

2.2 With effect from the Variation Date of this Variation Agreement, the Parties agree the following amendments to the Option Agreement:

2.2.1 the text of Recital B of the Option Agreement is amended as follows, where deletions are shown in struck through text and additions are shown in underlined text:

Summit is in addition funding certain research at the University of Oxford as provided for in a separate sponsored research agreement dated on or around the Effective Date and as subsequently amended from time to time (“**Sponsored Research Agreement**”).

For the sake of clarity, the Parties acknowledge that by virtue of an extension to the term of the Sponsored Research Agreement, the term of the Option Agreement shall be equivalently extended.

2.2.2 the text of Schedule 7 of the Option Agreement, entitled ‘Chemical Lead Criteria’ shall be deleted in its entirety and replaced with the Schedule 7 enclosed as the Appendix to this Variation Agreement entitled ‘Definition of Chemical Lead for New Generation Utrophin Modulators’ and any reference to Schedule 7 of the Option Agreement shall, from the date of its ratification by the Joint Steering Committee being 30 June 2015, be to this new, replacement, Schedule 7.

3. **GOVERNING LAW AND JURISDICTION**

3.1 This Variation Agreement and any dispute or claim arising out of or in connection with it or its subject matter or formation (including non-contractual disputes or claims) shall be governed by and construed in accordance with the law of England and Wales.

3.2 The Parties irrevocably agree that the courts of England and Wales have exclusive jurisdiction to settle any dispute or claim arising out of in connection with this Variation Agreement or its subject matter or its formation (including non-contractual disputes or claims).

---

**IN WITNESS of this Agreement**, the Parties have executed this Agreement through their duly authorised representatives.

**SIGNED** for and on behalf of **THE  
CHANCELLOR MASTERS AND  
SCHOLARS OF THE UNIVERSITY  
OF OXFORD:-**

) /s/ Lisa Driver Davidson  
)  
)  
) \_\_\_\_\_

Name: Lisa Driver Davidson

Title: Senior Research Services Manager  
University of Oxford

Date: 30/10/15

**SIGNED** for and on behalf of **SUMMIT  
THERAPEUTICS PLC:-**

) /s/ Glyn Edwards  
)  
) \_\_\_\_\_

Name: Glyn Edwards

Title: Chief Executive Officer

Date: 16<sup>th</sup> November 2015

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**SIGNED** for and on behalf of **ISIS  
INNOVATION LIMITED :-**

)) /s/ Linda Naylor  
))  
))  
)

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Name: Linda Naylor

Title: Managing Director  
Isis Innovation Ltd

Date: 6/11/15



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**Biological Profile:**

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- [\*\*]
- [\*\*]

Confidential Materials omitted and filed separately with the  
Securities and Exchange Commission. Double asterisks denote omissions.

**DATED 16<sup>th</sup> November 2015**

**(1) THE CHANCELLOR MASTERS AND SCHOLARS OF THE UNIVERSITY OF OXFORD**

- and -

**(2) SUMMIT THERAPEUTICS PLC**

- and -

**(3) ISIS INNOVATION LIMITED**

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**SECOND VARIATION AGREEMENT**

**relating to the Agreement for the Sponsorship of a  
Research Programme for the development of small  
molecule modulators of utrophin for the treatment of  
Duchenne Muscular Dystrophy dated 22 November 2013**

---

**THIS AGREEMENT** (the “**Second Variation Agreement**”) is dated 16<sup>th</sup> November 2015 (the “**Variation Date**”)

**BETWEEN:-**

- (1) **THE CHANCELLOR MASTERS AND SCHOLARS OF THE UNIVERSITY OF OXFORD**, whose administrative office is at University Offices, Wellington Square, Oxford, OX1 2JD (the “**University**”); and
  - (2) **SUMMIT THERAPEUTICS PLC**, a public limited company incorporated in England and Wales with company number 05197494 whose address is 85b Park Drive, Milton Park, Abingdon, Oxfordshire, OX14 4RY (the “**Sponsor**”); and
  - (3) **ISIS INNOVATION LIMITED**, a private limited company incorporated in England and Wales with company number 02199542, whose registered office is at University Offices, Wellington Square, Oxford, OX1 2JD (“**Isis**”),
- each a “**Party**” and together the “**Parties**”.

**RECITALS**

- (A) The Parties entered into an agreement for the sponsorship of a research programme relating to the development of small molecule modulators of utrophin for the treatment of Duchenne Muscular Dystrophy dated 22 November 2013 (the “**Agreement**”).
- (B) The Agreement was amended by way of a variation dated 16 July 2014 (the “**Variation Agreement**”).
- (C) On 19 February 2015, the Shareholders of the Sponsor passed a resolution to change the name of the Sponsor from Summit Corporation plc to Summit Therapeutics plc.
- (D) The Parties now wish to extend the term of the Agreement and to increase the level of research support and funding.

**NOW IT IS AGREED AS FOLLOWS:**

**1. DEFINITIONS AND INTERPRETATIONS**

- 1.1 The terms defined in the Agreement shall have the same meanings when used in this Second Variation Agreement unless specifically indicated otherwise.
- 1.2 A reference to this Second Variation Agreement shall include any Schedules.
- 1.3 The words “**include**”, “**including**”, or “**in particular**” are deemed to have the words “without limitation” following them.

2. **VARIATION**

2.1 With effect from the Variation Date of this Second Variation Agreement, the Parties agree the following amendments to the Agreement:

2.1.1 the text of clause 1.3 of the Agreement is amended as follows, where deletions are shown in struck through text and additions are shown in underlined text:

The Project Period shall mean the period from Effective Date ~~for a period of thirty six (36) months and lasting until 21 November 2019~~ with an option to extend the Project Period until 21 November 2020 (the "Extension Option"). The Extension Option may, and subject to clause 11.7, be exercised on or before the expiry of the Project Period. The Project Period may be extended by any further period that the Parties agree is required for the successful completion of the Project;

For the sake of clarity, the Parties acknowledge that by virtue of the extension to the term of the Agreement, the term of the Option Agreement shall be equivalently extended.

2.1.2 The document "Revised Development Plan" (as ratified by the Joint Steering Committee, 12 November 2014) shown in the Appendix to this Second Variation Agreement shall be inserted at the end of Schedule 1 of the Agreement, thereby incorporating it into that schedule.

2.1.3 The text of Schedule 3 of the Agreement is amended as follows, where deletions are shown in struck through text and additions are shown in underlined text:

<u>Date for Payment by the Sponsor</u>	<u>Amount (excluding VAT): £sterling</u>
[**]	[**]
[**]	[**]
[**]	[**]
[**]	[**]
[**]	[**]
[**]	[**]
[**]	[**]
[**]	[**]
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[**]	[**]
[**]	[**]
[**]	[**]
[**]	[**]
<b>TOTAL PAYABLE</b>	<b><del>1,537,372</del> 4,333,132</b>

The sums payable by the Sponsor between the [\*\*] of the Agreement and [\*\*] of the Agreement, inclusive, are to be used to fund a minimum of [\*\*]. A minimum of [\*\*] and a minimum of [\*\*].

It is noted that the £[\*\*] is not included in the above figures.

Should the Extension Option be exercised so that the Project Period is extended to 22 November 2020, then the following sums will also become payable:

<u>Date for Payment by the Sponsor</u>	<u>Amount (excluding VAT): £sterling</u>
[**]	[**]
[**]	[**]
[**]	[**]
[**]	[**]
<b>TOTAL PAYABLE UNDER THE EXTENSION OPTION</b>	<b>830,000</b>

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3. **GOVERNING LAW AND JURISDICTION**

- 3.1 This Second Variation Agreement and any dispute or claim arising out of or in connection with it or its subject matter or formation (including non-contractual disputes or claims) shall be governed by and construed in accordance with the law of England and Wales.
- 3.2 The Parties irrevocably agree that the courts of England and Wales have exclusive jurisdiction to settle any dispute or claim arising out of in connection with this Second Variation Agreement or its subject matter or its formation (including non-contractual disputes or claims).

---

**IN WITNESS of this Agreement**, the Parties have executed this Agreement through their duly authorised representatives.

**SIGNED** for and on behalf of **THE  
CHANCELLOR MASTERS AND  
SCHOLARS OF THE UNIVERSITY  
OF OXFORD:-**

) /s/ Lisa Driver Davidson  
)  
)  
) \_\_\_\_\_

Name: Lisa Driver Davidson

Title: Senior Research Services Manager  
University of Oxford

Date: 30/10/15

**SIGNED** for and on behalf of **SUMMIT  
THERAPEUTICS PLC:-**

) /s/ Glyn Edwards  
)  
) \_\_\_\_\_

Name: Glyn Edwards

Title: Chief Executive Officer

Date: 16 November 2015

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**SIGNED** for and on behalf of **ISIS  
INNOVATION LIMITED :-**

)) /s/ Linda Naylor  
))  
))  
)

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Name: Linda Naylor

Title: Managing Director  
Isis Innovation Ltd

Date: 6/11/15

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**APPENDIX**

**REVISED DEVELOPMENT PLAN (ADOPTED BY JSC 12.11.2014)**

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Page 8 of 8

Rules of the Summit Therapeutics plc

2016 Long Term Incentive Plan

Adopted by the board of directors of Summit Therapeutics plc on 21 January 2016

Expiry date: 21 January 2026

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Contents

1	DEFINITIONS AND INTERPRETATION	3
2	GRANT OF AWARDS	5
3	PERFORMANCE CONDITION	6
4	RESTRICTIONS ON TRANSFER AND BANKRUPTCY	6
5	DIVIDEND EQUIVALENTS	6
6	INDIVIDUAL LIMIT	6
7	PLAN LIMITS	7
8	REDUCTION OF AWARDS AND CLAWBACK	8
9	VESTING AND EXERCISE	9
10	TAXATION AND REGULATORY ISSUES	10
11	CASH EQUIVALENT/ NET SETTLEMENT	10
12	CESSATION OF EMPLOYMENT	11
13	CORPORATE EVENTS	13
14	ADJUSTMENTS	15
15	AMENDMENTS	15
16	LEGAL ENTITLEMENT	15
17	GENERAL	16
	SCHEDULE	17
1	CASH AWARDS	17

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**THE SUMMIT THERAPEUTICS PLC 2016 LONG TERM INCENTIVE PLAN**

**1 DEFINITIONS AND INTERPRETATION**

1.1 In this Plan, unless otherwise stated, the words and expressions below have the following meanings:

<b>“Award”</b>	a Conditional Award or an Option (or a Cash Conditional Award or Cash Option granted under Schedule 1 to the Plan);
<b>“AIM”</b>	a market operated by the London Stock Exchange;
<b>“AIM Rules”</b>	the rules for companies whose share are admitted to trading on AIM published by the London Stock Exchange;
<b>“Board”</b>	subject to Rule 13.10, the board of the Company or any duly authorised committee of the board;
<b>“Company”</b>	Summit Therapeutics plc registered in England and Wales under number 05197494;
<b>“Conditional Award”</b>	a right to acquire Shares subject to and in accordance with the Rules with no Exercise Period;
<b>“Control”</b>	the meaning given by section 995 of the Income Tax Act 2007;
<b>“Dealing Day”</b>	any day on which the London Stock Exchange is open for business;
<b>“Dealing Restrictions”</b>	restrictions imposed by the Company’s share dealing code, the AIM Rules or any applicable laws or regulations which impose restrictions on share dealing;
<b>“Eligible Employee”</b>	an employee (including an executive director) of the Company or any of its Subsidiaries;
<b>“Exercise Period”</b>	the period during which an Option may be exercised, such period not to exceed ten years from the Grant Date;
<b>“Exercise Price”</b>	in the case of an Option which has an Exercise Price, the price per Share payable to exercise the Option which, unless the Board determines otherwise, will be the Market Value of a Share on the Grant Date;
<b>“Grant Date”</b>	the date on which an Award is granted;
<b>“Group Member”</b>	the Company, any Subsidiary of the Company, any company which is (within the meaning of section 1159 of the Companies Act 2006) the Company’s holding company or a Subsidiary of the Company’s holding company or, if the Board so determines, any body corporate in relation to which the Company is able to exercise at least 20% of the equity voting rights and “Group” will be construed accordingly;



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<b>“Internal Reorganisation”</b>	where immediately after a change of Control of the Company, all or substantially all of the issued share capital of the acquiring company is owned directly or indirectly by the persons who were shareholders in the Company immediately before the change of Control;
<b>“Market Value”</b>	<p>in relation to a Share on any day an amount equal to:</p> <ul style="list-style-type: none"> <li>(i) if and so long as the Shares are admitted to trading on AIM or a recognised stock exchange, the closing price of a Share on AIM or a recognised stock exchange on (a) the Dealing Day immediately preceding the relevant date or, if the Board determines (b) the average middle market quotation of a Share for a number of Dealing Days within a period not exceeding 5 days immediately preceding the relevant date provided that (b) shall not apply for the purpose of determining Market Value in Rule 11; or</li> <li>(ii) subject to (i) above, the market value of a Share as determined in accordance with Part VIII Taxation of Chargeable Gains Act 1992 on the relevant date (or such earlier date as determined by the Board);</li> </ul>
<b>“Normal Vesting Date”</b>	<p>the date on which an Award will normally Vest, which:</p> <ul style="list-style-type: none"> <li>(i) in respect of an Award which is subject to the satisfaction of a Performance Condition will be the later of: <ul style="list-style-type: none"> <li>(a) the date on which the Board determines that the Performance Condition has been satisfied in accordance with Rule 9.1; and</li> <li>(b) the third anniversary of the Grant Date,</li> </ul> <p>(or such other date determined by the Board and notified to the Participant in accordance with Rule 2.3); and</p> </li> <li>(ii) in respect of an Award which is not subject to the satisfaction of a Performance Condition, the third anniversary of the Grant Date (or such other date determined by the Board and notified to the Participant in accordance with Rule 2.3);</li> </ul>
<b>“Option”</b>	a right to acquire Shares subject to and in accordance with the Rules during an Exercise Period;
<b>“Participant”</b>	any person who holds an Award (or, in respect of Rules 8.4 and 8.6, any person to whom Shares have been issued or transferred or to whom cash is paid in respect of an Award) or following his death, his personal representatives;
<b>“Performance Condition”</b>	a condition or conditions imposed under Rule 3.1 which relates to performance;

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<b>“Performance Period”</b>	the period over which a Performance Condition will be measured which, unless the Board determines otherwise, will be at least three years;
<b>“Plan”</b>	the Summit Therapeutics plc 2016 Long Term Incentive Plan in its present form or as from time to time amended;
<b>“Rules”</b>	the rules of the Plan, as set out in this document and “Rule” will be construed accordingly;
<b>“Share”</b>	a fully paid ordinary share in the capital of the Company;
<b>“Subsidiary”</b>	the meaning given by section 1159 of the Companies Act 2006;
<b>“Tax Liability”</b>	any tax or social security contributions liability in connection with an Award for which the Participant is liable and for which any Group Member or former Group Member is obliged to account to any relevant authority (including, without limitation, any secondary Class 1 (employer’s) national insurance contributions covered by any agreement or election entered into pursuant to Rule 2.5, but excluding any secondary Class 1 (employer’s) national insurance contributions which are not covered by such an agreement or election));
<b>“Trustee”</b>	the trustee or trustees for the time being of any employee benefit trust, the beneficiaries of which include Eligible Employees; and
<b>“Vest”</b>	(i) in relation to a Conditional Award, the point at which a Participant becomes entitled to receive the Shares under his Award in accordance with the Rules ; and  (ii) in relation to an Option, the point at which it becomes capable of exercise in accordance with the Rules ,  and “Vesting”, “Vesting Date”, “Vested” and “Unvested” will be construed accordingly.

1.2 References in the Plan to:

- 1.2.1 any statutory provisions are to those provisions as amended or re-enacted from time to time;
- 1.2.2 the singular include the plural and vice versa; and
- 1.2.3 the masculine include the feminine and vice versa.

1.3 Headings do not form part of the Plan.

**2 GRANT OF AWARDS**

- 2.1 Subject to Rule 2.2, during a Grant Period, the Board may grant an Award to an Eligible Employee in its discretion subject to the Rules and upon such additional terms as the Board may determine.

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- 2.2 The grant of an Award will be subject to obtaining any approval or consent required by any relevant authority), any Dealing Restrictions and any other applicable laws or regulations (whether in the UK or overseas).
- 2.3 Awards must be granted by deed (or in such other written form as the Board determines) and, as soon as reasonably practicable after the Grant Date, Participants must be notified of the terms of their Award including any Performance Condition and such additional terms as it may consider appropriate.
- 2.4 No Award may be granted under the Plan after the tenth anniversary of the date on which the Plan was adopted by the Board.
- 2.5 The Board may make the exercise of an Option or Vest of a Conditional Award conditional upon the Participant having entered into an agreement or election pursuant to paragraphs 3A or 3B of Schedule 1 to the Social Security Contributions and Benefits Act 1992.

### **3 PERFORMANCE CONDITION**

- 3.1 Unless the Board determines otherwise, the Vest of Awards will be subject to the satisfaction of a Performance Condition. Subject to Rules 12 and 13, the Performance Condition will be measured over the Performance Period.
- 3.2 The Board may amend or substitute a Performance Condition if one or more events occur which cause the Board to consider that a substituted or amended Performance Condition would be more appropriate and would not be materially less difficult to satisfy.

### **4 RESTRICTIONS ON TRANSFER AND BANKRUPTCY**

- 4.1 An Award must not be transferred, assigned, charged or otherwise disposed of in any way (except in the event of the Participant's death, to his personal representatives) and will lapse immediately on any attempt to do so.
- 4.2 An Award will lapse immediately if the Participant is declared bankrupt or, if the Participant is outside the UK, any analogous event occurs.

### **5 DIVIDEND EQUIVALENTS**

- 5.1 The Board may decide at any time prior to the issue or transfer of the Shares in respect of an Award that has Vested that the Participant will receive an amount (in cash and/or additional Shares) equal in value to any dividends that would have been paid on those Shares on such terms and over such period (ending no later than the Vest Date) as the Board may determine. This amount may assume the reinvestment of dividends (on such basis as the Board may determine) and may exclude or include special dividends.
- 5.2 Any such amount will be payable as soon as reasonably practicable after Vest or, in the case of an Option, exercise, of the relevant Award.

### **6 INDIVIDUAL LIMIT**

- 6.1 No Eligible Employee may be granted an Award which would, at the time it is granted, cause the market value (as determined by the Board) of all the Shares subject to Awards granted to that Eligible Employee in respect of a particular financial year of the Company to exceed ten times his annual base salary and to the extent any Award exceeds this limit it will be scaled back accordingly.

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**7 PLAN LIMITS**

- 7.1 The Board must not grant an Award which would cause the number of Shares allocated under the Plan and under any other employee share plan adopted by the Company to exceed such number as represents fifteen per cent of the ordinary share capital of the Company in issue at that time.
- 7.2 Subject to Rules 7.3 and 7.4, in determining the limits set out in Rule 7.1 Shares are treated as allocated if they have been newly issued by the Company or transferred from treasury to satisfy an option, award or other right granted during the ten years prior to the proposed Grant Date (an “award”), or in the case of such an award in respect of which Shares are yet to be delivered, if the Board intends that new Shares will be issued or that Shares from treasury will be transferred and for these purposes the number of Shares allocated includes:
- 7.2.1 Shares which have been issued or may be issued to any Trustee; and
- 7.2.2 Shares which have been or may be transferred from treasury to any Trustee
- in either case for the Trustee to then transfer to satisfy an award (unless these Shares have already been counted under this Rule).
- 7.3 The Board may determine that Shares transferred from treasury will cease to count as allocated for the purposes of Rule 7.2 if guidelines published by institutional investor representative bodies no longer require such Shares to be counted.
- 7.4 The number of Shares allocated does not include:
- 7.4.1 Shares in respect of which the right to acquire such Shares lapses or is released; and
- 7.4.2 existing Shares other than treasury Shares which are transferred or to which an award relates; and
- 7.4.3 Shares allocated in respect of awards which are then satisfied in cash.
- 7.5 If the Board purports to grant one or more Awards which are inconsistent with the limits in this Rule 7:
- 7.5.1 if only one Award is purported to be so granted, that Award will be limited and will take effect from the Grant Date over the maximum number of Shares permitted by those limits; and
- 7.5.2 if more than one Award is purported to be so granted, each such Award will be reduced as determined by the Board and will take effect from the Grant Date over the maximum number of Shares permitted by those limits.
- 7.6 The Board may make such adjustments to the method of assessing the limits set out in Rules 7.1 and 7.2 as it considers appropriate in the event of any variation of the Company’s share capital.

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**8 REDUCTION OF AWARDS AND CLAWBACK**

- 8.1 Notwithstanding any other Rule, the Board may, in its discretion and taking into account all relevant factors including the Participant's level of responsibility, determine that the provisions of either or both Rules 8.3 and 8.4 should be applied in respect of any Award if:
- 8.1.1 in the case of the provisions of Rule 8.3, any of the circumstances described in Rule 8.2 have occurred; and
  - 8.1.2 in the case of the provisions of Rule 8.4, any of the circumstances described in Rules 8.2.1 or 8.2.4 have occurred,
- within the period beginning on the Grant Date (or, in relation to an Award which is subject to a Performance Condition, the first day of the Performance Period) or such earlier date as the Board determines on or before the Grant Date and ending on the later of second anniversary of Vesting or fifth anniversary of the Grant Date, or such longer period as is required under US Securities and Exchange Commission ("SEC") rules that are applicable to the Company.
- 8.2 The circumstances referred to in Rule 8.1 are:
- 8.2.1 a material misstatement of the Group's audited financial results;
  - 8.2.2 a material failure of risk management by the Company, any other Group Member or a relevant business unit;
  - 8.2.3 serious reputational damage to the Company, any other Group Member or a relevant business unit;
  - 8.2.4 material misconduct on the part of the Participant; or
  - 8.2.5 any other circumstances which the Board in its discretion considers to be similar in their nature or effect.
- 8.3 The Board may, in its discretion, determine at any time prior to the Vest of an Award to:
- 8.3.1 reduce (including to zero) the number of Shares to which an Award relates or may relate; and/or
  - 8.3.2 impose further conditions on an Award.
- 8.4 The Board may, in its discretion, determine that at any time after the Vesting of an Award and prior to the later of the second anniversary of Vesting and the fifth anniversary of the Grant Date (or such longer period as is required by SEC rules that are applicable to the Company) to:
- 8.4.1 take the action referred to in Rule 8.3.1 or 8.3.2 if a Vested Option has not yet been exercised, or if Shares or cash have not yet been delivered to the Participant following the Vesting of a Conditional Award or exercise of an Option; and/or
  - 8.4.2 require a Participant or former Participant to make a cash payment to the Company in respect of some or all of the Shares or cash delivered to him under the Award; and/or
  - 8.4.3 require a Participant or former Participant to transfer for nil consideration some or all of the Shares delivered to him under the Award

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and the Board will have discretion to determine the basis on which the amount of cash or Shares is calculated including whether and if so to what extent to take account of any tax or social security liability applicable to the Award.

8.5 If the action or conduct of any Participant, Group Member or relevant business unit is under investigation prior to the second anniversary of the Vest Date pursuant to this Rule 8 and such investigation has not yet been concluded by that date, the period referred to in Rule 8.4 will end on such later date as the Board considers appropriate to allow such investigation to be concluded.

8.6 The Board may decide to:

8.6.1 reduce (including to zero) the number of Shares to which an Award relates or may relate;

8.6.2 impose further conditions on an Award; and/or

8.6.3 require a Participant to transfer for nil consideration some or all of the Shares delivered to him under an Award or make a cash payment to the Company in respect of some or all of the Shares delivered to him under an Award

to effect the recovery of sums paid or Shares delivered under any provisions similar to this Rule 8 which are included in any bonus plan or share plan (other than the Plan) operated by any Group Member and if the Board decides to apply Rule 8.6.3 the Board will have the discretion to determine the basis on which the amount of cash or Shares is calculated including whether and if so to what extent to take account of any tax or social security liability applicable to the Award.

8.7 For the purposes of this Rule 8, references to Group Member or a relevant business unit include references to any former Group Member or former business unit.

8.8 If the Board exercises its discretion in accordance with this Rule 8, it will confirm this in writing to each Participant and, if necessary, the Trustee.

## **9 VESTING AND EXERCISE**

9.1 As soon as reasonably practicable after the end of the Performance Period relating to an Award in respect of which a Performance Condition has been imposed, the Board will determine if and to what extent the Performance Condition has been satisfied. To the extent that the Performance Condition has not been satisfied in full, the remainder of the Award will lapse immediately.

9.2 Subject to Rules 10, 12 and 13, an Award will Vest:

9.2.1 on the Normal Vesting Date; or

9.2.2 if on the Normal Vesting Date (or on any other date on which an Award is due to Vest under Rules 12 or 13) a Dealing Restriction applies to the Award, on the date on which such Dealing Restriction lifts; and

an Option may then be exercised in accordance with Rules 9.3 to 9.5 until the tenth anniversary of the Grant Date (or such earlier date as the Board may determine on or prior to the Grant Date) in such manner as the Board determines, after which time it will lapse.

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- 9.3 To exercise an Option, a Participant must pay the aggregate Exercise Price (if any) for the Shares in respect of which he is exercising the Option, or enter into arrangements acceptable to the Board to pay that amount.
- 9.4 Subject to Rules 9.5 and 10, an Option may be exercised pursuant to this Rule 9 or Rules 12 and 13 in such form and manner as the Board may determine, provided that exercise of an Option will not take effect until the Company receives:
- 9.4.1 a notice of exercise of the Option; and
- 9.4.2 payment of the aggregate Exercise Price (if any), or an undertaking to pay that amount.
- 9.5 Options may be exercised in whole or in part.
- 9.6 Subject to Rules 10 and 11, where a Conditional Award has Vested or an Option has been exercised, the number of Shares in respect of which the Award has Vested or been exercised together with any additional Shares or cash to which a Participant becomes entitled under Rule 5 will be issued, transferred or paid (as applicable) to the Participant as soon as reasonably practicable thereafter.

## **10 TAXATION AND REGULATORY ISSUES**

- 10.1 A Participant will be responsible for and indemnifies each relevant Group Member and the Trustee against any Tax Liability relating to his Award. Any Group Member and/or the Trustee may withhold an amount equal to such Tax Liability from any amounts due to the Participant (to the extent such withholding is lawful) and/or make any other arrangements as it considers appropriate to ensure recovery of such Tax Liability including, without limitation, the sale of sufficient Shares acquired subject to the Award to realise an amount equal to the Tax Liability.
- 10.2 The Vest of an Award, the exercise of an Option and the issue or transfer of Shares under the Plan will be subject to obtaining any approval or consent required by any relevant authority, any Dealing Restrictions or any other applicable laws or regulations (whether in the UK or overseas).

## **11 CASH EQUIVALENT/ NET SETTLEMENT**

- 11.1 Subject to Rule 11.4, at any time prior to the date on which Shares in respect of an Award that has been Vested or exercised have been issued or transferred to a Participant, the Board may determine that, in substitution for his right to acquire some or all of the Shares to which his Award relates, the Participant will instead receive a cash sum in accordance with Rule 11.2 or a reduced number of Shares in accordance with Rule 11.3.
- 11.2 A cash sum to which a Participant becomes entitled under this Rule 11.2 will be equal to the market value (as determined by the Board) of that number of Shares which would otherwise have been issued or transferred, less, in the case of an Option, the aggregate Exercise Price payable (if any) in respect of the exercise of the Option in relation to those Shares and for these purposes:
- 11.2.1 in the case of a Conditional Award, market value will be determined on the Vest Date;
- 11.2.2 in the case of an Option, market value will be determined on the date of exercise; and

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- 11.2.3 the cash sum will be paid to the Participant as soon as reasonably practicable after the Vest or exercise of the Award (or, if later, the date of such determination) net of any deductions (including but not limited to, any Tax Liability or similar liabilities) as may be required by law.
- 11.3 The number of Shares to which a Participant becomes entitled under this Rule 11.3 will be equal to the market value (as determined by the Board) of that number of Shares which would otherwise have been issued or transferred, less (if the Board determines) any deductions (including, but not limited to, any Tax Liability or similar liabilities) as may be required by law in respect of the Award in relation to those Shares and, in the case of an Option, the aggregate Exercise Price payable (if any) in respect of the Option in relation to those Shares and for these purposes:
- 11.3.1 in the case of a Conditional Award, market value will be determined on the Vest Date;
- 11.3.2 in the case of an Option, market value will be determined on the date of exercise; and
- 11.3.3 the number of Shares to which a Participant is entitled will be issued or transferred to him as soon as reasonably practicable after the Vest of the Conditional Award or the exercise of the Option.
- 11.4 The Board may determine that this Rule 11 will not apply to an Award, or any part of it

## **12 CESSATION OF EMPLOYMENT**

### **Death**

- 12.1 If a Participant dies, unless the Board determines otherwise, an Award which has not Vested at the date of his death will Vest as soon as practicable thereafter in accordance with Rule 12.2.
- 12.2 The number of Shares in respect of which an Award Vests pursuant to Rule 12.1 will be determined by the Board in its discretion, taking into account:
- 12.2.1 unless the Board determines otherwise, the extent to which any Performance Condition has been satisfied at the date of death; and
- 12.2.2 unless the Board determines otherwise, the period of time that has elapsed from the start of the Performance Period to the date of death as a proportion of the Performance Period or if the Award is not subject to a Performance Condition, the Grant Date to the date of death, or such other period of time as the Board determines,
- and to the extent that an Award does not Vest in full, the remainder will lapse immediately.
- 12.3 An Option which Vests in accordance with Rule 12.1 or which was already Vested at the date of death may then be exercised, subject to Rule 13, during the period of 12 months from the later of the date of death and the date of Vesting (or such other period as the Board may determine), after which time it will lapse.

### **Cessation of employment prior to the Vesting Date**

- 12.4 If a Participant ceases to hold office or employment with a Group Member prior to the Vesting Date other than in accordance with Rule 12.1 or 12.5, his Award will lapse at that time.



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- 12.5 If a Participant ceases to hold office or employment with a Group Member prior to the Vesting Date as a result of:
- 12.5.1 ill-health, injury or disability as established to the satisfaction of the Board;
  - 12.5.2 redundancy or retirement with the agreement of the Participant's employing company;
  - 12.5.3 the Participant's employing company ceasing to be a Group Member or the transfer of an undertaking or part of an undertaking (in which the Participant is employed) to a person who is not a Group Member; or
  - 12.5.4 any other reason at the Board's discretion, except where a Participant is summarily dismissed,
- unless the Board determines that an Award will Vest in accordance with Rule 12.6, an Award will continue and, subject to it Vesting and lapsing earlier under Rule 13, will Vest in accordance with Rule 12.7 on the Normal Vesting Date.
- 12.6 If the Board determines that an Award will Vest in accordance with this Rule 12.6, it will Vest in accordance with Rule 12.7 as soon as reasonably practicable following the date of the Participant's cessation of office or employment (or on such other date as determined by the Board).
- 12.7 The number of Shares in respect of which the Award Vests pursuant to Rule 12.5 or 12.6 will be determined by the Board in its discretion, taking into account:
- 12.7.1 unless the Board determines otherwise, the extent to which any Performance Condition has been satisfied at the end of the Performance Period (if Rule 12.5 applies) or at the date of the Participant's cessation of office or employment (if Rule 12.6 applies); and
  - 12.7.2 unless the Board determines otherwise, the period of time that has elapsed from the start of the Performance Period to the date of cessation of office or employment as a proportion of the Performance Period or if the Award is not subject to a Performance Condition, the Grant Date to the date of cessation of office or employment, or such other period of time as the Board determines,
- and to the extent that an Award does not Vest in full, the remainder will lapse immediately.
- 12.8 An Option may be exercised, subject to it lapsing earlier under Rule 13, for a period of six months (or such other period as the Board may determine) from the Vest Date after which time it will lapse.

**Cessation of employment – Options which have Vested but not been exercised**

- 12.9 Subject to Rules 12.3 and 12.10, if a Participant ceases to hold office or employment with a Group Member on or after the Vesting Date, his Option will lapse at that time.
- 12.10 Subject to Rule 12.3, if a Participant ceases to hold office or employment with a Group Member on or after the Vesting Date as a result of resignation by the Participant from such office or employment or an event listed in Rules 12.5.1 to 12.5.4 an Option which has Vested prior to the date of cessation may be exercised, subject to it lapsing earlier under Rule 13, for a period of six months (or such other period as the Board may determine) from the date of such cessation, after which time it will lapse.
- 12.11 For the purposes of the Plan, no person will be treated as ceasing to hold office or employment with a Group Member until that person no longer holds:
- 12.11.1 an office or employment; or

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12.11.2 a right to return to work  
with any Group Member.

### **13 CORPORATE EVENTS**

- 13.1 Where any of the events described in Rule 13.3 occur, subject to Rules 13.8 and 13.9, all Awards which have not yet Vested will Vest in accordance with Rule 13.2 at the time of such event unless they are Vested earlier in accordance with Rule 13.5. Options will be exercisable for three months (or such other period as the Board may determine) from the date of the relevant event, after which time all Options will lapse.
- 13.2 Any Unvested Award will be Vested pursuant to Rule 13.1 to the extent determined by the Board in its discretion, taking into account, unless the Board determines otherwise the extent to which any Performance Condition has, in the Board's opinion, been satisfied and, unless the Board determines otherwise, the period of time that has elapsed from the Grant Date to the date of the relevant event (or the date of cessation of office or employment if earlier). To the extent that an Award does not Vest, or is not exchanged in accordance with Rules 13.8 and 13.9, it will lapse immediately.
- 13.3 The events referred to in Rule 13.1 are:
- 13.3.1 General offer  
If any person (either alone or together with any person acting in concert with him):
- 13.3.1.1 obtains Control of the Company as a result of making a general offer to acquire Shares; or
- 13.3.1.2 already having Control of the Company, makes an offer to acquire all of the Shares other than those which are already owned by him and such offer becomes wholly unconditional.
- 13.3.2 Scheme of arrangement  
A compromise or arrangement in accordance with section 899 of the Companies Act 2006 for the purposes of a change of Control of the Company is sanctioned by the Court.
- 13.4 If a person becomes bound or entitled to acquire Shares under sections 979 to 982 or 983 to 985 of the Companies Act 2006 (takeover offers: right of offeror to buy out minority shareholder etc.), any Option which has not already been exercised or lapsed may be exercised (to the extent permitted by Rule 13.2) while that person remains so bound or entitled. All unexercised Options will lapse when that person ceases to be so bound or entitled.
- 13.5 Loss of corporation tax deduction  
If the Board determines that there would be a loss of corporation tax deduction under Part 12 of the Corporation Tax Act 2009 (or any similar legislation or rules in a jurisdiction outside the United Kingdom) if Awards were to Vest or Options were to be exercised on or after an event described in Rule 13.3 or 13.4, then the Board may resolve that Awards will Vest at an earlier date.

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13.6 Winding-up

On the passing of a resolution for the voluntary winding-up or the making of an order for the compulsory winding up of the Company, the Board will determine:

13.6.1 whether and to what extent Awards which have not yet Vested will Vest taking into account the extent, unless the Board determines otherwise to which any Performance Condition has, in the Board's opinion, been satisfied and, unless the Board determines otherwise, the period of time that has elapsed from the start of the Grant Date to the date of the relevant event (or the date of cessation of office or employment if earlier), or such other period as the Board may determine; and

13.6.2 the period of time during which any Vested Option may be exercised, after which time it will lapse.

To the extent that an Award does not Vest it will lapse immediately.

13.7 Other events

If the Company is or may be affected by a demerger, delisting, special dividend or other event and in the opinion of the Board, may affect the current or future value of Shares to a material extent and the Board determines it would not be appropriate or practical to adjust Awards in accordance with Rule 14 the Board may determine that the following provisions will apply:

13.7.1 an Award will Vest on such terms as the Board may determine;

13.7.2 if an Award Vests under this Rule 13.7, it will Vest taking into account the extent, unless the Board determines otherwise to which any Performance Condition has in the Board's opinion been satisfied and, unless the Board determines otherwise, the period of time that has elapsed from the Grant Date to the date of the relevant event (or the date of cessation of office or employment if earlier), or such other period as the Board may determine; and

13.7.3 the Board will determine the period during which any Vested Option may be exercised, after which time it will lapse.

To the extent that the Award does not Vest it will lapse immediately, unless the Board determines otherwise.

13.8 Exchange

An Award will not Vest under Rule 13.1 but will be exchanged on the terms set out in Rule 13.9 to the extent that:

13.8.1 an offer to exchange the Award (the "**Existing Award**") is made and accepted by a Participant;

13.8.2 there is an Internal Reorganisation, unless the Board determines that an Award should Vest under Rule 13.1; or

13.8.3 the Board decides (before the relevant event) that an Existing Award will be exchanged automatically.

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13.9 Exchange terms

If this Rule 13.9 applies, the Existing Award will not Vest but will be exchanged in consideration of the grant of a new award which, in the opinion of the Board, is equivalent to the Existing Award, but relates to shares in a different company (whether the acquiring company or a different company).

13.10 Meaning of Board

Any reference to the Board in this Rule 13 means the members of the Board immediately prior to the relevant event.

**14 ADJUSTMENTS**

14.1 The number of Shares subject to an Award, any Performance Condition and /or the Exercise Price (if any) of an Option may be adjusted in such manner as the Board determines, in the event of:

14.1.1 any variation of the share capital of the Company; or

14.1.2 a demerger, delisting, special dividend or other event which may, in the opinion of the Board, affect the current or future value of Shares.

**15 AMENDMENTS**

15.1 Except as described in this Rule 15, the Board may at any time amend the Rules or, subject to Rule 3.2 the terms of any Award.

15.2 An amendment that is to the material disadvantage of the existing rights of a Participant will not be made under Rule 15.1 unless the Participant has approved the amendment.

15.3 No amendment will be made under this Rule 15 if it would prevent the Plan from being an employees' share scheme in accordance with section 1166 of the Companies Act 2006.

**16 LEGAL ENTITLEMENT**

16.1 This Rule 16 applies during a Participant's employment with any Group Member and after the termination of such employment, whether or not the termination is lawful.

16.2 Nothing in the Plan or its operation forms part of the terms of employment of a Participant and the rights and obligations arising from a Participant's employment with any Group Member are separate from, and are not affected by, his participation in the Plan. Participation in the Plan does not create any right to continued employment with a Group Member for any Participant.

16.3 The grant of any Award to a Participant does not create any right for that Participant to be granted any further Awards or to be granted Awards on any particular terms, including the number of Shares to which Awards relate.

16.4 By participating in the Plan, a Participant waives all rights to compensation for any loss in relation to the Plan, including:

16.4.1 any loss or reduction of any rights or expectations under the Plan in any circumstances or for any reason (including lawful or unlawful termination of the Participant's employment);

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- 16.4.2 any exercise of a discretion or a decision taken in relation to an Award or to the Plan, or any failure to exercise a discretion or take a decision; and
- 16.4.3 the operation, suspension, termination or amendment of the Plan.

## **17 GENERAL**

- 17.1 The Plan will terminate upon the date stated in Rule 2.4, or at any earlier time by the passing of a resolution by the Board or an ordinary resolution of the Company in general meeting. Termination of the Plan will be without prejudice to the existing rights of Participants.
- 17.2 Shares issued or transferred from treasury under the Plan will rank equally in all respects with the Shares then in issue, except that they will not rank for any voting, dividend or other rights attaching to Shares by reference to a record date preceding the date of issue or transfer from treasury.
- 17.3 By participating in the Plan, a Participant consents to the collection, holding, processing and transfer of his personal data by any Group Member or any third party for all purposes relating to the operation of the Plan, including but not limited to, the administration and maintenance of Participant records, providing information to future purchasers of the Company or any business in which the Participant works and the transfer of information about the Participant to a country or territory outside the European Economic Area or elsewhere.
- 17.4 The Plan will be administered by the Board. The Board will have full authority, consistent with the Plan, to administer the Plan, including authority to interpret and construe any provision of the Plan and to adopt regulations for administering the Plan. Decisions of the Board will be final and binding on all parties.
- 17.5 Any notice or other communication in connection with the Plan may be delivered personally or sent by electronic means or post, in the case of a company to its registered office (for the attention of the company secretary), and in the case of an individual to his last known address, or, where he is a director or employee of a Group Member, either to his last known address or to the address of the place of business at which he performs the whole or substantially the whole of the duties of his office or employment. Where a notice or other communication is given by post, it will be deemed to have been received 72 hours after it was put into the post properly addressed and stamped, and if by electronic means, when the sender receives electronic confirmation of delivery or if not available, 24 hours after sending the notice.
- 17.6 No third party will have any rights under the Contracts (Rights of Third Parties) Act 1999 to enforce any term of the Plan (without prejudice to any right of a third party which exists other than under that Act).
- 17.7 The Rules will be governed by and construed in accordance with the laws of England and Wales. Any person referred to in the Plan submits to the exclusive jurisdiction of the Courts of England and Wales.

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## SCHEDULE 1

### CASH AWARDS

#### 1 CASH AWARDS

The Rules of the Summit Therapeutics plc 2016 Long-Term Incentive Plan will apply to a right to receive a cash sum granted under this Schedule as if it was either a Conditional Award (a “**Cash Conditional Award**”) or an Option (a “**Cash Option**”), except as set out in this Schedule. Where there is any conflict between the Rules and this Schedule, the terms of this Schedule will prevail.

- 1.1 Each Cash Conditional Award or Cash Option will relate to a certain number of notional Shares.
- 1.2 On the Vest of a Cash Conditional Award or the exercise of a Cash Option the Participant will be entitled to receive a cash sum, calculated by reference to the value of the number of notional Shares to which the Cash Conditional Award or the Cash Option relates, on the following basis:
  - 1.2.1 in the case of a Cash Conditional Award the cash sum will be equal to the market value (as determined by the Board) of the notional Shares to which the Cash Conditional Award relates on the Vest Date; and
  - 1.2.2 in the case of a Cash Option the cash sum will be equal to the market value (as determined by the Board) of the notional Shares to which the Cash Option relates on the date of exercise less the aggregate Exercise Price payable (if any) in respect of the exercise of the Cash Option in relation to the notional shares.
- 1.3 The cash sum payable under paragraph 1.2 above will be paid to the Participant as soon as reasonably practicable after the Vest of the Cash Conditional Award or the exercise of the Cash Option, net of any deductions (including, but not limited to, any Tax Liability or similar liabilities) as may be required by law.
- 1.4 A Cash Conditional Award or Cash Option will not confer any right on the holder to receive Shares or any interest in Shares.

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## SCHEDULE 2

### CSOP OPTIONS

This Schedule constitutes the “Summit Therapeutics plc 2016 Company Share Option Plan (the “CSOP”) and sets out the terms on which the Board may grant CSOP Options.

The purpose of this CSOP is to enable the Company to grant CSOP Options to Eligible Employees in accordance with ITEPA Schedule 4. No CSOP Options may be granted under this Schedule other than in accordance with ITEPA Schedule 4, and no other form of Award may be granted under this Schedule.

#### 1. INTERPRETATION

- 1.1 References in this Schedule to ‘Rules’ are to rules of the Plan and references to ‘Sections’ are to the sections of this Schedule.
- 1.2 The Rules apply to CSOP Options except as modified below and references in the Rules to an Award or Option will be interpreted as references to a CSOP Option for the purposes of this Schedule.
- 1.3 In the event of any conflict between the Rules and the Sections of this Schedule, this Schedule shall take precedence.

#### 2. DEFINITIONS

- 2.1 For the purposes of this Schedule, the following definitions shall apply:

“Associated Company”	has the meaning given to it in paragraph 35(1) of ITEPA ITEPA Schedule 4;
“CSOP Limit”	the limit specified from time to time under paragraph 6(1) of ITEPA Schedule 4;
“CSOP Option”	an Option granted under this Schedule;
“HMRC”	HM Revenue & Customs;
“ITEPA Schedule 4”	Schedule 4 to the Income Tax (Earnings and Pensions) Act 2003;
“Market Value”	in relation to a share on any day an amount equal to its market value determined in accordance with Part VIII Taxation of Chargeable Gains Act 1992 on the relevant date;
“Restriction	has the meaning given by paragraph 36(3) of ITEPA Schedule 4; and

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**“Variation of Capital”** in relation to the equity share capital of the Company, a capitalisation issue, an offer or invitation made by way of rights, a subdivision, consolidation, reduction or any other variation in respect of which a CSOP Option may be adjusted in accordance with the requirements of ITEPA Schedule 4.

**3. ELIGIBILITY TO BE GRANTED AN APPROVED OPTION**

- 3.1 A CSOP Option may only be granted to an Eligible Employee who is a director of the Company or any of its Subsidiaries if he is obliged to devote not less than 25 hours a week (excluding meal breaks) to the performance of the duties of his office or employment with the Company or Subsidiary.
- 3.2 A CSOP Option may not be granted to an Eligible Employee who is excluded from participation by virtue of paragraph 9 of ITEPA Schedule 4 (material interest in a close company).

**4. GRANT OF A CSOP OPTION**

- 4.1 The Exercise Price of a CSOP Option must not be less than the Market Value of a Share at the Grant Date.
- 4.2 Each CSOP Option shall be granted in such a manner as to constitute a legal right to acquire the Shares subject to the CSOP Option, subject to the terms of this Schedule.
- 4.3 The Board must not grant a CSOP Option to an Eligible Employee which would on the Grant Date cause the aggregate Market Value of the Shares which he may acquire by exercising that CSOP Option, any other CSOP Option or any other option which is to be taken into account for the purposes of the CSOP Limit, to exceed the amount permitted from time to time under the CSOP Limit.
- 4.4 If a CSOP Option is purported to be granted in breach of the CSOP Limit, that CSOP Option shall take effect from the Grant Date over the maximum number of Shares over which it may be granted within that limit.
- 4.5 For the purposes of this Section 4:
- 4.5.1 the Market Value of a Share will be determined at the Grant Date of the relevant option; and
- 4.5.2 the Market Value of a Share subject to a Restriction will be determined as if the Restriction did not apply.

**5. SHARES SUBJECT TO A CSOP OPTION**

- 5.1 The Shares subject to a CSOP Option must satisfy the conditions referred to in paragraph 15 of ITEPA Schedule 4.



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**6. INFORMATION TO BE PROVIDED TO PARTICIPANTS**

- 6.1 As soon as reasonably practicable following the grant of a CSOP Option, the Participant shall be informed of:
- 6.1.1 the Exercise Price;
  - 6.1.2 the number and description of Shares which may be acquired on the exercise of a CSOP Option;
  - 6.1.3 any Restrictions to which those Shares are subject;
  - 6.1.4 the times at which the CSOP Option may be exercised (in whole or in part); and
  - 6.1.5 the circumstances under which the CSOP Option will lapse or be cancelled (in whole or in part).

**7. VESTING AND EXERCISE OF CSOP OPTIONS**

- 7.1 A Participant may not exercise a CSOP Option while he is excluded from being granted a CSOP Option under paragraph 9 of ITEPA Schedule 4 (material interest in a close company).
- 7.2 Rule 5 (*Dividend Equivalents*) shall not apply to any CSOP Options.
- 7.3 Rule 10.1 shall not apply to CSOP Options. A Participant will be responsible for and indemnify each relevant Group Member and/or the Trustee against any Tax Liability arising as a result of the exercise of a CSOP Option and will reimburse the Group Member and/or the Trustee (as relevant) for the Tax Liability within thirty days of it arising. A CSOP Option may only be exercised if there are arrangements in place acceptable to the Board to provide for the reimbursement of any Tax Liability arising as a result of the exercise of the CSOP Option, which may include:
- 7.3.1 the Participant making a payment to the Group Member and/or the Trustee;
  - 7.3.2 the Group Member withholding the Tax Liability from the Participant's remuneration (to the extent permitted by law); or
  - 7.3.3 with the Participant's agreement, any other arrangement acceptable to the Group Member and/or the Trustee to reimburse the Tax Liability, including authorising the sale of sufficient of the Shares on the Participant's behalf.

**8. CASH EQUIVALENT / NET SETTLEMENT**

- 8.1 Rule 11 of the Plan shall not apply to CSOP Options.

**9. CESSATION OF EMPLOYMENT**

- 9.1 Rule 12 of the Plan shall be deleted and replaced by this Section 9 and in the case of CSOP Options, any reference within the Plan to Rule 12 shall be read as referring to Section 9.
- 9.2 Subject to Sections 9.3, 9.6 and 9.9, if a Participant ceases to hold office or employment with a Group Member his CSOP Option (whether or not Vested) will lapse at that time.

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- 9.3 If a Participant dies, a CSOP Option which has not Vested at the date of his death will Vest as soon as practicable thereafter in accordance with Section 9.4.
- 9.4 The number of Shares in respect of which a CSOP Option Vests pursuant to Section 9.3 will be determined by the Board in its discretion, taking into account:
- 9.4.1 unless the Board determines otherwise, the extent to which any Performance Condition has been satisfied at the date of death; and
  - 9.4.2 unless the Board determines otherwise, the period of time that has elapsed from the start of the Performance Period to the date of death as a proportion of the Performance Period or if the CSOP Option is not subject to a Performance Condition, the Grant Date to the date of death,
- and to the extent that a CSOP Option does not Vest in full, the remainder will lapse immediately.
- 9.5 A CSOP Option which Vests in accordance with Section 9.3 or which was already Vested at the date of death may then be exercised, subject to Rule 13, during the period of 12 months from the date of death after which time it will lapse.
- 9.6 If a Participant ceases to hold office or employment with a Group Member as a result of:
- 9.6.1 redundancy (within the meaning of the Employment Rights Act 1996);
  - 9.6.2 retirement;
  - 9.6.3 injury or disability evidenced to the satisfaction of the Board;
  - 9.6.4 the Participant's employing company ceasing to be a Group Member or the transfer of an undertaking or part of an undertaking (in which the Participant is employed) to a person who is not a Group Member; or
  - 9.6.5 any other reason at the Board's discretion, except where a Participant is summarily dismissed,
- Section 9.7 will apply, unless the Board has exercised its discretion under Section 9.6.5 in which case Section 9.8 will apply.
- 9.7 If the Participant ceases to hold office or employment with a Group Member for a reason referred to in Sections 9.6.1 to 9.6.4:
- 9.7.1 a CSOP Option which has not Vested at the date of cessation will Vest as soon as practicable thereafter in accordance with Section 9.7.2;
  - 9.7.2 the number of Shares in respect of which a CSOP Option Vests pursuant to Section 9.7.1 will be determined by the Board in its discretion, taking into account:
    - 9.7.2.1 unless the Board determines otherwise, the extent to which any Performance Condition has been satisfied at the date of cessation; and

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- 9.7.2.2 unless the Board determines otherwise, the period of time that has elapsed from the start of the Performance Period to the date of cessation as a proportion of the Performance Period or if the CSOP Option is not subject to a Performance Condition, the Grant Date to the date of cessation,
- and to the extent that a CSOP Option does not Vest in full, the remainder will lapse immediately; and
- 9.7.3 subject to it lapsing earlier under Rule 13, a CSOP Option may be exercised during the period of 6 months from the date of cessation after which time it will lapse.
- 9.8 If the Participant ceases to hold office or employment with a Group Member and the Board exercises its discretion under Section 9.6.5:
- 9.8.1 a CSOP Option which has not Vested at the date of cessation will continue and, subject to it Vesting and lapsing earlier under Rule 13, will Vest in accordance with Section 9.8.2 on the Normal Vesting Date;
- 9.8.2 the number of Shares in respect of which a CSOP Option Vests pursuant to Section will be determined by the Board in its discretion, taking into account:
- 9.8.2.1 unless the Board determines otherwise the extent to which any Performance Condition has been satisfied at the end of the Performance Period; and
- 9.8.2.2 unless the Board determines otherwise, the period of time that has elapsed from the start of the Performance Period to the date of cessation as a proportion of the Performance Period or if the CSOP Option is not subject to a Performance Condition, the Grant Date to the date of cessation,
- and to the extent that a CSOP Option does not Vest in full, the remainder will lapse immediately; and
- 9.8.3 subject to it lapsing earlier under Rule 13, a CSOP Option may be exercised during the period of 6 months from the Normal Vesting Date after which time it will lapse.
- 9.9 Subject to Section 9.3, if a Participant ceases to hold office or employment with a Group Member on or after the Vesting Date as a result of resignation by the Participant from such office or employment or an event listed in Section 9.6, a CSOP Option which has Vested prior to the date of cessation may be exercised, subject to it lapsing earlier under Rule 13, for a period of six months from the date of such cessation, after which time it will lapse.
- 9.10 For the purposes of the Schedule, no person will be treated as ceasing to be in office or employment with a Group Member until that person no longer holds
- 9.10.1 an office or employment; or
- 9.10.2 a right to return to work,
- with any Group Member.

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## 10. CORPORATE EVENTS

- 10.1 This Section 10.1 is supplemental to Rule 13. If in consequence of a person obtaining Control of the Company a result of an event referred to in Rule 13.3 Shares no longer meet the requirements referred to in paragraph 15 of ITEPA Schedule 4, a CSOP Option may be exercised to the extent Vested (in accordance with Rule 13.1) no later than 20 days after the date on which Control is obtained, notwithstanding that the Shares no longer meet those requirements.
- 10.2 Rules 13.8 and 13.9 shall not apply to CSOP Options and in the context of CSOP Options any reference within the Rules to “Rules 13.8 and 13.9” shall be interpreted as referring to the “Sections 10.3 and 10.4” of this Section 10.
- 10.3 Subject to Section 10.4, a CSOP Option will not Vest under Rule 13.1 if an agreement to release the CSOP Option in consideration of the grant of a new share option is made between the Participant and the acquiring company (as defined in Section 10.5 below) in accordance with Section 10.6.
- 10.4 If there is an Internal Reorganisation, a CSOP Option will not Vest under Rule 13.1 if the acquiring company offers to grant a new share option in consideration for the release of the CSOP Option in accordance with Section 10.6. To the extent the Participant does not agree to the release of the CSOP Option in accordance with Section 10.6, the CSOP Option will lapse one month after the date of the Internal Reorganisation.
- 10.5 If another company (the “**acquiring company**”):
- 10.5.1 obtains control of the Company as a result of making:
    - (i) a general offer to acquire the whole of the issued ordinary share capital of the Company which is made on a condition such that, if it is met, the person making the offer will have Control of the Company; or
    - (ii) a general offer to acquire all the Shares in the Company which are of the same class as the shares which may be acquired by the exercise of CSOP Options granted under this Schedule;
  - 10.5.2 obtains Control of the Company as a result of a compromise or arrangement sanctioned by the court under section 899 of the Companies Act 2006; or
  - 10.5.3 becomes bound or entitled to acquire shares in the Company under sections 979 to 982 of the Companies Act 2006,
- a CSOP Option may be released in consideration of the grant to the holder of that CSOP Option of a new share option in accordance with Section 10.6.
- 10.6 If a CSOP Option is to be released in consideration of the grant of a new share option in accordance with this Section 10.6:
- 10.6.1 that must be done with the agreement of the acquiring company;
  - 10.6.2 the agreement must be made in the relevant period determined in accordance with paragraph 26 of ITEPA Schedule 4 and before the CSOP Option lapses in accordance with Rule 13.1 or (in the case of an Internal Reorganisation) Section 10.4; and

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- 10.6.3 any new share option granted in consideration of the release of a CSOP Option in accordance with this Section 10.6 must satisfy the requirements of paragraphs 27(2) – 27(4) (inclusive) of ITEPA Schedule 4.
- 10.7 If a CSOP Option is exchanged for a new option in accordance with Section 10.6, the Company will remain “the scheme organiser” within the meaning of paragraph 2(2) of ITEPA Schedule 4 for the purposes of this Schedule and no further CSOP Options may be granted after the date on which any new option is granted.
- 11. ADJUSTMENTS**
- 11.1 Rule 14 of the Plan shall be deleted and replaced by this Section 11 and in the case of CSOP Options, any reference within the Plan to Rule 14 shall be read as referring to Section 11.
- 11.2 The number of Shares subject to a CSOP Option and/or the Exercise Price may be varied in the event of a Variation of Share Capital provided that:
- 11.2.1 the market value of the Shares which may be acquired under the CSOP Option determined, in the case of a Share subject to a Restriction as if that Restriction did not apply, is substantially the same immediately before and after the variation or variations; and
- 11.2.2 the aggregate Exercise Price applying to the CSOP Option is substantially the same immediately before or after the variation or variations.
- 12. AMENDMENTS**
- 12.1 No amendment to the Plan or this Schedule which would cause this Schedule to cease to meet the requirements of ITEPA Schedule 4 will have effect in relation to any CSOP Option unless and until the Board has determined that the amendment will take effect even if it causes this Schedule to cease to meet those requirements.
- 13. BOARD DISCRETION**
- 13.1 Any discretion exercisable or action or determination to be undertaken by the Board under Section 9 or Rules 3, 8, 9 and 13 shall be exercised or undertaken by the Board fairly and reasonably.

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## SCHEDULE 3

### US PARTICIPANTS

#### 1 DEFINITIONS AND INTERPRETATION

- 1.1 The purpose of this Schedule 3 is to ensure that Options granted to and held by US Participants have an Exercise Price that is at least Fair Market Value, and that Conditional Awards granted to and held by US Participants meet the requirements of the short term deferral exemption to s409A of the United States Internal Revenue Code. The terms of such Awards should be interpreted in a manner consistent with these requirements.
- 1.2 The Rules will apply to Awards held by Participants, who are or who may become US Participants, except as set out in this Schedule 3. Where there is any conflict between the Rules and this Schedule 3, the terms of this Schedule 3 will prevail.
- 1.3 In this Schedule 3, references to “Rules” are to the rules of the Plan and references to “Paragraphs” are to paragraphs of this Schedule 3. Words and phrases shall have the same meaning as in the Rules, except that the following amendments and additions will be made to words and expressions in the Rules.

“ADS” means an American Depositary Share being an authorised depositary security denominated in US dollars and listed on NASDAQ which represents a number of Shares and which may be evidenced by an American Depositary Receipt;

“Fair Market Value” an amount equal to the fair market value (as determined in accordance with U.S. Treasury Regulation Section 1.409A-1(b)(5)(iv)(A)) of a Share;

“Share” means a fully paid ordinary share in the capital of the Company and, unless the context otherwise requires, includes ADSs; and

“US Participant” means a Participant who is a:

- (a) US citizen;
- (b) US permanent resident (evidenced by a green-card);
- (c) non-US citizen who is posted to the United States on or after the Grant Date and who is (or is expected to become) subject to US taxation as a resident alien; or
- (d) non-US citizen to the extent that he or she is or becomes subject to Section 409A of the Internal Revenue Code 1986, as amended, with regard to an Award including a non-resident alien taxpayer, with respect to some portion of an Award that is deemed to be income from a US source.

#### 2 OPTIONS

- 2.1 The following new Rule 2.6 will be added to Rule 2:

“The Exercise Price of an Option granted to a US Participant must not be less than the Fair Market Value of a Share at the Grant Date.”

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2.2 The following new Rule 2.7 will be added to Rule 2:

“If a Participant becomes a US Participant after the Grant Date, any unvested Options subject to an Exercise Price that is less than the Fair Market Value on the Grant Date, and any unvested Cash Options that he holds at that time will be converted (without any further action on the part of the US Participant or the Company) into Conditional Awards or Cash Conditional Awards respectively, unless the Company determines otherwise, either at the Grant Date or subsequently.”

**3 DIVIDEND EQUIVALENTS**

3.1 The following wording will be added to Rule 5.2 after the words “of the relevant Award”:

“In any event, in the case of a Conditional Award, this should be no later than 31 December of the year in which the Award Vests.”

**4 VESTING AND EXERCISE**

4.1 The following wording will be added to Rule 9.6 after the words “as soon as reasonably practicable thereafter”:

“In any event, in the case of a Conditional Award, this should be no later than 31 December of the year in which the Award Vests.”

**5 CASH EQUIVALENT**

5.1 The following wording will be added Rule 11.2.3 after the words “as soon as reasonably practicable after Vest”:

“In any event, in the case of a Conditional Award, this should be no later than 31 December of the year in which the Award Vests.”

**6 CESSATION OF EMPLOYMENT – CONDITIONAL AWARDS**

*The provisions of Rule 12 shall apply to Options held by US Participants. The following shall apply to Conditional Awards held by US Participants:*

6.1 The following wording in Rule 12.1 will be deleted “unless the Board determines otherwise”.

6.2 If an Award is not subject to a Performance Condition, Rules 12.5 to 12.8 will not apply and will be replaced with the following:

12.5 “If a Participant ceases to hold office or employment with a Group Member as a result of:

12.5.1 ill-health, injury or disability as established to the satisfaction of the Board;

12.5.2 redundancy;

12.5.3 the Participant’s employing company ceasing to be a Group Member or the transfer of an undertaking or part of an undertaking (in which the Participant is employed) to a person who is not a Group Member; or

12.5.4 any other reason at the Board’s discretion, except where a Participant is summarily dismissed,

his Award will Vest as soon as practicable following the date of cessation.

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- 12.6 The number of Shares in respect of which an Award Vests pursuant to Rule 12.5 will be determined by the Board in its discretion, taking into account unless the Board determines otherwise, the period of time that has elapsed from the Grant Date to the date of cessation of office or employment, and to the extent that an Award does not Vest in full, the remainder will lapse immediately.”

**7 AMENDMENTS**

- 7.1 The following Rule 15.4 will be added to Rule 15:

“Notwithstanding the provisions of this Rule 15, any such amendment will only be effective to the extent that it complies with s.409A of the US Internal Revenue Code of 1986 as amended from time to time.”

**8 CASH AWARDS**

- 8.1 The following wording will be added to paragraph 1.3 of Schedule 1, after the words “as may be required by law”:

“In any event, in the case of a Cash Conditional Award, this should be no later than 31 December of the year in which the Award Vests.”



SUBSIDIARIES OF THE REGISTRANT

<u>Name of Subsidiary</u>	<u>Jurisdiction of incorporation or organization</u>
Summit Therapeutics Inc.	Delaware
Summit Corporation Limited	England and Wales
Summit (Oxford) Limited	England and Wales
Summit (Wales) Limited	England and Wales
Summit (Cambridge) Limited	England and Wales
Summit Discovery 1 Limited	England and Wales
Summit Corporation Employee Benefit Trust Company Limited	England and Wales
MuOx Limited	England and Wales

**Certification by the Chief Executive Officer  
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002**

I, Glyn Edwards, certify that:

1. I have reviewed this annual report on Form 20-F of Summit Therapeutics plc (the "Company");
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the Company as of, and for, the periods presented in this report;
4. The Company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the Company and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the Company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the Company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting; and
5. The Company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Company's auditors and the audit committee of the Company's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Company's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the Company's internal control over financial reporting.

Date: May 11, 2016

By: /s/ Glyn Edwards  
Name: Glyn Edwards  
Title: Chief Executive Officer

**Certification by the Chief Financial Officer  
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002**

I, Erik Ostrowski, certify that:

1. I have reviewed this annual report on Form 20-F of Summit Therapeutics plc (the "Company");
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the Company as of, and for, the periods presented in this report;
4. The Company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the Company and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the Company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the Company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting; and
5. The Company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Company's auditors and the audit committee of the Company's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Company's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the Company's internal control over financial reporting.

Date: May 11, 2016

By: /s/ Erik Ostrowski  
Name: Erik Ostrowski  
Title: Chief Financial Officer

**Certification by the Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C.  
Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002**

In connection with the Annual Report on Form 20-F of Summit Therapeutics plc (the "Company") for the year ended January 31, 2016, as filed with the U.S. Securities and Exchange Commission on the date hereof (the "Report"), the undersigned Glyn Edwards, as Chief Executive Officer of the Company, and Erik Ostrowski, as Chief Financial Officer of the Company, each hereby certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of his knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: May 11, 2016

By: /s/ Glyn Edwards  
Name: Glyn Edwards  
Title: *Chief Executive Officer*

By: /s/ Erik Ostrowski  
Name: Erik Ostrowski  
Title: *Chief Financial Officer*